

Catalogue of selected products

The Danfoss Group

Danfoss A/S is an international Group and a leader in research, development and production of mechanical and electronic components and solutions.

Our products help to heat and cool homes and offices, refrigerate food and control production lines. In short, Danfoss contributes to the conveniences of modern life as well as to a safer and cleaner environment.

Our success as a producer stems from our ability to combine traditional mechanics-based technologies with electronic solutions. Through innovative mechanical design and electronics, often including embedded software, we provide robust products of high quality, reliability and versatility.

Danfoss strives to meet its goals with minimal consumption of raw materials and energy, the least possible impact on its surroundings, and the most efficient use of resources.

Danfoss is one of Denmark's largest industrial Groups and is based in Nordborg, in southern Denmark.

Danfoss Industrial Automation

Danfoss Industrial Automation offers you easy access to one of the widest ranges of quality industrial controls available, including:

- Solenoid valves
- Externally-operated valves
- Thermostatically-operated valves
- Electro-mechanical contactors
- Electronic contactors and motor controllers
- Pressure and temperature switches
- Pressure transmitters
- Temperature sensors and transmitters



More and more customers are turning to us to improve productivity and reduce costs through our combination of value-added services and product line competencies. Our specialists will be happy to advise you on product selection and configuration to meet your specific needs.

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Solenoid valves



Type	EV210A	EV220A	EV310A	EV210B	EV220B 6-22 series	EV220B 15-50 series	EV225B	EV250B	EV310B
Pages	4	4	5	5	6	6	7	7	7
									
Function	NC	NC / NO	NC / NO	NC	NC / NO	NC / NO	NC	NC / NO	NC
Connection	G 1/8 - G 1/4	G 1/4 - G 2	G 1/8 - G 1/4	G 1/8 - G 1	G 1/4 - G 1	G 1/2 - G 2	G 3/8 - G 1	G 3/8 - G 1	G 1/8 - G 1/4
Orifice size	1.2 - 3.5 mm	6 - 50 mm	1.2 - 2 mm	1.5 - 25 mm	6 - 22 mm	15 - 50 mm	10 - 25 mm	10 - 22 mm	2 mm
Seal material	FKM / EPDM	EPDM / NBR	FKM	FKM / EPDM	FKM / EPDM	FKM / EPDM / NBR	PTFE	FKM / EPDM	FKM
Differential pressure	0 - 30 bar	0.2 - 16 bar	0 - 20 bar	0 - 30 bar	0.1 - 30 bar	0.3 - 16 bar	0.2 - 10 bar	0 - 10 bar	0 - 16 bar
Body material	Brass	Brass	Brass	Brass / DZR brass	Brass	Brass / DZR brass	DZR brass	DZR brass	Brass
Kv	0.04 - 0.26 m ³ /h	1 - 32 m ³ /h	0.04 - 0.08 m ³ /h	0.08 - 8 m ³ /h	0.7 - 6 m ³ /h	4 - 40 m ³ /h	2.2 - 6 m ³ /h	2.5 - 7 m ³ /h	0.15 m ³ /h

Solenoid valves - Complete valves

Type	Complete valves (including coil) EV225B	Complete valves (including coil) EV210B	Complete valves (including coil) EV220B	Complete valves (including coil) EV250B
Pages	8	8	8	8
				
Function	NC	NC	NC	NC / NO
Connection	G 3/8 - G 1	G 1/8 - G 3/8	G 3/8 - G 2	G 3/8 - G 1
Orifice size	10 - 25 mm	1.5 - 4.5 mm	10 - 40 mm	10 - 22 mm
Seal material	PTFE	FKM / NBR	NBR	EPDM
Differential pressure	0.2 - 10 bar	0 - 30 bar	0.1 - 30 bar	0 - 10 bar
Body material	DZR brass	Brass	Bras	DZR brass
Kv	2.2 - 6 m ³ /h	0.08 - 0.55 m ³ /h	1.5 - 24 m ³ /h	2.5 - 7 m ³ /h

Industrial Valves

Solenoid valves

Danfoss solenoid valve bodies and electrical coils are normally supplied separately and then combined. They are assembled quickly and simply without tools, providing optimum product flexibility and availability. If a coil does need to be replaced, it can be done without stopping or draining any system. The solenoid valves are also available as assembled units if required.



EV210A Direct-operated 2/2-way compact solenoid valves



EV210A covers a wide range of small, direct-operated 2/2-way solenoid valves for use in industrial machinery. The compact design together with the broad range of coils means that EV210A covers a broad variety of industrial applications.

- 2/2-way
- Compact dimensions
- Direct-operated
- DN 1.2 - DN 3.5
- G 1/8 to G 1/4
- Brass or stainless steel valve body
- NC (normally closed) and NO (normally open) versions

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV210A	032H8000	16	0.10	NC	G 1/8	1.2 mm	Direct	EPDM	0 - 30 bar	Brass	0.04
EV210A	032H8001	16	0.10	NC	G 1/8	1.2 mm	Direct	FKM	0 - 30 bar	Brass	0.04
EV210A	032H8002	16	0.10	NC	G 1/8	1.5 mm	Direct	EPDM	0 - 30 bar	Brass	0.08
EV210A	032H8003	16	0.10	NC	G 1/8	1.5 mm	Direct	FKM	0 - 30 bar	Brass	0.08
EV210A	032H8004	16	0.10	NC	G 1/8	2 mm	Direct	EPDM	0 - 30 bar	Brass	0.11
EV210A	032H8005	16	0.10	NC	G 1/8	2 mm	Direct	FKM	0 - 30 bar	Brass	0.11
EV210A	032H8006	16	0.10	NC	G 1/8	2.5 mm	Direct	EPDM	0 - 20 bar	Brass	0.17
EV210A	032H8007	16	0.10	NC	G 1/8	2.5 mm	Direct	FKM	0 - 20 bar	Brass	0.17
EV210A	032H8008	16	0.10	NC	G 1/8	3 mm	Direct	EPDM	0 - 13 bar	Brass	0.22
EV210A	032H8009	16	0.10	NC	G 1/8	3 mm	Direct	FKM	0 - 13 bar	Brass	0.22
EV210A	032H8014	16	0.12	NC	G 1/4	2.5 mm	Direct	EPDM	0 - 20 bar	Brass	0.17
EV210A	032H8015	16	0.12	NC	G 1/4	2.5 mm	Direct	FKM	0 - 20 bar	Brass	0.17
EV210A	032H8016	16	0.12	NC	G 1/4	3 mm	Direct	EPDM	0 - 14 bar	Brass	0.22
EV210A	032H8017	16	0.12	NC	G 1/4	3 mm	Direct	FKM	0 - 14 bar	Brass	0.22
EV210A	032H8018	16	0.12	NC	G 1/4	3.5 mm	Direct	EPDM	0 - 11 bar	Brass	0.26

EV220A Servo-operated 2/2-way solenoid valves



EV220A is a compact indirect servo-operated 2/2-way solenoid valve program, especially designed for use in machines and equipment with limited space.

- 2/2-way
- Servo-operated
- DN 6 - DN 50
- G 1/4" to G 2"
- Brass valve body
- NC (normally closed) and NO (normally open) versions
- ISO 228/1 or NPT thread connection

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV220A	042U4001	15	0.51	NC	G 1/4	6 mm	Servo	EPDM	0.2 - 16 bar	Brass	1.00
EV220A	042U4003	15	0.52	NC	G 1/4	6 mm	Servo	NBR	0.2 - 16 bar	Brass	1.00
EV220A	042U4011	15	0.49	NC	G 3/8	10 mm	Servo	EPDM	0.2 - 16 bar	Brass	1.60
EV220A	042U4013	15	0.48	NC	G 3/8	10 mm	Servo	NBR	0.2 - 16 bar	Brass	1.60
EV220A	042U4012	15	0.46	NC	G 1/2	10 mm	Servo	EPDM	0.2 - 16 bar	Brass	1.60
EV220A	042U4014	15	0.46	NC	G 1/2	10 mm	Servo	NBR	0.2 - 16 bar	Brass	1.60
EV220A	042U4022	24	0.56	NC	G 1/2	14 mm	Servo	EPDM	0.3 - 16 bar	Brass	4.00
EV220A	042U4024	24	0.55	NC	G 1/2	14 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00
EV220A	042U4031	24	0.82	NC	G 3/4	18 mm	Servo	EPDM	0.3 - 16 bar	Brass	7.00
EV220A	042U4032	24	0.82	NC	G 3/4	18 mm	Servo	NBR	0.3 - 16 bar	Brass	7.00
EV220A	042U4041	12	1.07	NC	G 1	22 mm	Servo	EPDM	0.3 - 16 bar	Brass	7.00
EV220A	042U4042	12	1.02	NC	G 1	22 mm	Servo	NBR	0.3 - 16 bar	Brass	7.00
EV220A	042U4084	1	2.01	NC	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	15.00
EV220A	042U4085	1	2.02	NC	G 1 1/2	32 mm	Servo	EPDM	0.3 - 16 bar	Brass	15.00
EV220A	042U4086	1	3.10	NC	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00
EV220A	042U4087	1	3.10	NC	G 1 1/2	40 mm	Servo	EPDM	0.3 - 16 bar	Brass	18.00
EV220A	042U4088	1	4.88	NC	G 2	50 mm	Servo	NBR	0.3 - 16 bar	Brass	32.00
EV220A	042U4089	1	4.87	NC	G 2	50 mm	Servo	EPDM	0.3 - 16 bar	Brass	32.00
EV220A	042U4053	15	0.54	NO	G 1/4	6 mm	Servo	NBR	0.2 - 16 bar	Brass	1.00
EV220A	042U4063	15	0.50	NO	G 3/8	10 mm	Servo	NBR	0.2 - 16 bar	Brass	1.60
EV220A	042U4074	24	0.58	NO	G 1/2	14 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00
EV220A	042U4082	12	0.80	NO	G 3/4	18 mm	Servo	NBR	0.3 - 16 bar	Brass	7.00
EV220A	042U4092	12	1.8	NO	G 1	22 mm	Servo	NBR	0.3 - 16 bar	Brass	7.00

EV310A Direct-operated 3/2-way compact solenoid valves



EV310A covers a wide range of small competitive, direct-operated 3/2-way solenoid valves for use within industrial applications, for example pilot valve applications.

- 3/2-way
- Direct-operated
- DN 1.2 - DN 2
- G 1/8" to G 1/4"
- Brass or stainless steel valve body
- NC (normally closed) and NO (normally open) versions

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV310A	032H8087	16	0.10	NC	G 1/8	1.5 mm	Direct	FKM	0 - 12 bar	Brass	0.07
EV310A	032H8089	16	0.10	NC	G 1/8	2 mm	Direct	FKM	0 - 8 bar	Brass	0.08
EV310A	032H8095	16	0.12	NC	G 1/4	1.2 mm	Direct	FKM	0 - 20 bar	Brass	0.04
EV310A	032H8097	16	0.12	NC	G 1/4	1.5 mm	Direct	FKM	0 - 12 bar	Brass	0.07
EV310A	032H8099	16	0.12	NC	G 1/4	2 mm	Direct	FKM	0 - 8 bar	Brass	0.08
EV310A	032H8125	16	0.10	NO	G 1/8	1.2 mm	Direct	FKM	0 - 13 bar	Brass	0.04

EV210B Direct-operated 2/2-way solenoid valves



EV210B covers a wide range of direct-operated 2/2-way solenoid valves for universal use. EV210B is a real robust program with high performance and can be used in all kind of tough working conditions.

- 2/2-way
- High Performance series
- Direct-operated
- DN 1.5 - DN 25
- Brass or stainless steel valve body
- NC (normally closed) and NO (normally open) versions
- ISO 228/1 G 1/8" to G 1"
- UL listed version with NPT. for North America (EVI)

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV210B	032U5702	20	0.19	NC	G 1/8	1.5 mm	Direct	FKM	0 - 30 bar	Brass	0.08
EV210B	032U5704	20	0.20	NC	G 1/8	2 mm	Direct	FKM	0 - 30 bar	Brass	0.15
EV210B	032U5705	20	0.24	NC	G 1/8	3 mm	Direct	EPDM	0 - 30 bar	Brass	0.30
EV210B	032U5706	20	0.24	NC	G 1/8	3 mm	Direct	FKM	0 - 30 bar	Brass	0.30
EV210B	032U3629	20	0.18	NC	G 1/4	1.5 mm	Direct	FKM	0 - 30 bar	Brass	0.08
EV210B	032U5707	20	0.18	NC	G 1/4	2 mm	Direct	EPDM	0 - 30 bar	Brass	0.15
EV210B	032U5708	20	0.18	NC	G 1/4	2 mm	Direct	FKM	0 - 30 bar	Brass	0.15
EV210B	032U5709	20	0.22	NC	G 1/4	3 mm	Direct	EPDM	0 - 30 bar	Brass	0.30
EV210B	032U5710	20	0.23	NC	G 1/4	3 mm	Direct	FKM	0 - 30 bar	Brass	0.30
EV210B	032U3601	20	0.22	NC	G 1/4	4.5 mm	Direct	FKM	0 - 13 bar	Brass	0.55
EV210B	032U3642	-	0.20	NC	G 3/8	3 mm	Direct	EPDM	0 - 30 bar	Brass	0.30
EV210B	032U3643	20	0.21	NC	G 3/8	3 mm	Direct	FKM	0 - 30 bar	Brass	0.30
EV210B	032U3605	20	0.21	NC	G 3/8	4.5 mm	Direct	EPDM	0 - 13 bar	Brass	0.55
EV210B	032U3606	20	0.21	NC	G 3/8	4.5 mm	Direct	FKM	0 - 13 bar	Brass	0.55
EV210B	032U3607	20	0.30	NC	G 3/8	6 mm	Direct	EPDM	0 - 6 bar	Brass	0.70
EV210B	032U3608	20	0.31	NC	G 3/8	6 mm	Direct	FKM	0 - 6 bar	Brass	0.70
EV210B	032U3615	20	0.28	NC	G 1/2	8 mm	Direct	EPDM	0 - 3 bar	Brass	1.00
EV210B	032U3616	20	0.28	NC	G 1/2	8 mm	Direct	FKM	0 - 3 bar	Brass	1.00
EV210B	032U3617	20	0.29	NC	G 1/2	10 mm	Direct	EPDM	0 - 1.6 bar	Brass	1.50
EV210B	032U3618	20	0.29	NC	G 1/2	10 mm	Direct	FKM	0 - 1.6 bar	Brass	1.50
EV210B	032U3619	24	0.58	NC	G 1/2	15 mm	Direct	EPDM	0 - 0.45 bar	DZR brass	2.85
EV210B	032U3620	24	0.60	NC	G 1/2	15 mm	Direct	FKM	0 - 0.45 bar	DZR brass	2.85
EV210B	032U3621	12	0.87	NC	G 3/4	20 mm	Direct	EPDM	0 - 0.4 bar	DZR brass	4.50
EV210B	032U3622	12	0.87	NC	G 3/4	20 mm	Direct	FKM	0 - 0.4 bar	DZR brass	4.50
EV210B	032U3623	12	1.12	NC	G 1	25 mm	Direct	EPDM	0 - 0.35 bar	DZR brass	8.00
EV210B	032U3624	12	1.12	NC	G 1	25 mm	Direct	FKM	0 - 0.35 bar	DZR brass	8.00

EV220B (6-22 series) Servo-operated 2/2-way solenoid valves



EV220B 6-22 is a direct servo-operated 2/2-way solenoid valve program with connections from 1/4" to 1". This program is especially for OEM applications demanding a robust solution and moderate flow rates.

- 2/2-way
- Servo-operated
- DN 6 - DN 22
- Brass or DZR (de-zincification resistant) brass valve body
- NC (normally closed) and NO (normally open) versions
- ISO 228/1 or NPT thread connection (EVSI and EVSI-U)

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV220B	032U1236	20	0.26	NC	G 1/4	6 mm	Servo	EPDM	0.1 - 20 bar	Brass	0.70
EV220B	032U1237	20	0.26	NC	G 1/4	6 mm	Servo	FKM	0.1 - 30 bar	Brass	0.70
EV220B	032U1241	20	0.24	NC	G 3/8	6 mm	Servo	EPDM	0.1 - 20 bar	Brass	0.70
EV220B	032U1242	20	0.24	NC	G 3/8	6 mm	Servo	FKM	0.1 - 30 bar	Brass	0.70
EV220B	032U1246	20	0.34	NC	G 3/8	10 mm	Servo	EPDM	0.1 - 20 bar	Brass	1.50
EV220B	032U1247	20	0.34	NC	G 3/8	10 mm	Servo	FKM	0.1 - 30 bar	Brass	1.50
EV220B	032U1251	20	0.31	NC	G 1/2	10 mm	Servo	EPDM	0.1 - 20 bar	Brass	1.50
EV220B	032U1252	20	0.31	NC	G 1/2	10 mm	Servo	FKM	0.1 - 30 bar	Brass	1.50
EV220B	032U1255	15	0.35	NC	G 1/2	12 mm	Servo	FKM	0.3 - 10 bar	Brass	2.50
EV220B	032U1256	15	0.35	NC	G 1/2	12 mm	Servo	EPDM	0.3 - 10 bar	Brass	2.50
EV220B	032U1260	12	0.72	NC	G 3/4	18 mm	Servo	FKM	0.3 - 10 bar	Brass	6.00
EV220B	032U1261	12	0.73	NC	G 3/4	18 mm	Servo	EPDM	0.3 - 10 bar	Brass	6.00
EV220B	032U1263	12	0.96	NC	G 1	22 mm	Servo	EPDM	0.3 - 10 bar	Brass	6.00
EV220B	032U1266	12	0.95	NC	G 1	22 mm	Servo	FKM	0.3 - 10 bar	Brass	6.00
EV220B	032U1238	20	0.24	NO	G 3/8	6 mm	Servo	EPDM	0.1 - 10 bar	Brass	0.70
EV220B	032U1239	20	0.23	NO	G 3/8	6 mm	Servo	FKM	0.1 - 10 bar	Brass	0.70
EV220B	032U1249	20	0.32	NO	G 1/2	10 mm	Servo	FKM	0.1 - 10 bar	Brass	1.00

EV220B (15-50 series) Servo-operated 2/2-way solenoid valves



EV220B 15-50 is a universal indirect servo-operated 2/2-way solenoid valve program. Valve body in brass, dezincification resistant brass and stainless steel ensures that a broad variety of application can be covered. Built-in pilot filter as standard, adjustable closing time and enclosures up to IP67 ensures optimal performance even under critical working conditions.

- 2/2-way
- Servo-operated
- DN 15 - DN 50
- Valve body available in brass, DZR brass, gun metal or stainless steel
- NC and NO versions
- ISO 228/1 or NPT thread connection (EVSI and EVSI-U)
- Built in filter for protection of pilot system
- Water hammer damped
- Adjustable closing time available

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV220B	032U5815	24	0.73	NC	G 1/2	15 mm	Servo	EPDM	0.3 - 16 bar	DZR brass	4.00
EV220B	032U7115	24	0.76	NC	G 1/2	15 mm	Servo	EPDM	0.3 - 16 bar	Brass	4.00
EV220B	032U7116	24	0.74	NC	G 1/2	15 mm	Servo	FKM	0.3 - 10 bar	Brass	4.00
EV220B	032U7170	24	0.73	NC	G 1/2	15 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00
EV220B	032U5820	24	0.92	NC	G 3/4	20 mm	Servo	EPDM	0.3 - 16 bar	DZR brass	8.00
EV220B	032U7120	24	0.93	NC	G 3/4	20 mm	Servo	EPDM	0.3 - 16 bar	Brass	8.00
EV220B	032U7121	24	0.92	NC	G 3/4	20 mm	Servo	FKM	0.3 - 10 bar	Brass	8.00
EV220B	032U7171	24	0.93	NC	G 3/4	20 mm	Servo	NBR	0.3 - 16 bar	Brass	8.00
EV220B	032U7125	12	1.40	NC	G 1	25 mm	Servo	EPDM	0.3 - 16 bar	Brass	11.00
EV220B	032U7126	12	1.40	NC	G 1	25 mm	Servo	FKM	0.3 - 10 bar	Brass	11.00
EV220B	032U7172	12	1.39	NC	G 1	25 mm	Servo	NBR	0.3 - 16 bar	Brass	11.00
EV220B	032U5832	9	2.08	NC	G 1 1/4	32 mm	Servo	EPDM	0.3 - 16 bar	DZR brass	18.00
EV220B	032U7132	9	2.05	NC	G 1 1/4	32 mm	Servo	EPDM	0.3 - 16 bar	Brass	18.00
EV220B	032U7133	9	2.07	NC	G 1 1/4	32 mm	Servo	FKM	0.3 - 10 bar	Brass	18.00
EV220B	032U7173	9	2.06	NC	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00
EV220B	032U5840	6	3.07	NC	G 1 1/2	40 mm	Servo	EPDM	0.3 - 16 bar	DZR brass	24.00
EV220B	032U7140	6	3.11	NC	G 1 1/2	40 mm	Servo	EPDM	0.3 - 16 bar	Brass	24.00
EV220B	032U7141	6	3.13	NC	G 1 1/2	40 mm	Servo	FKM	0.3 - 10 bar	Brass	24.00
EV220B	032U7174	6	3.16	NC	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00
EV220B	032U5850	4	4.49	NC	G 2	50 mm	Servo	EPDM	0.3 - 16 bar	DZR brass	40.00
EV220B	032U7150	4	4.91	NC	G 2	50 mm	Servo	EPDM	0.3 - 16 bar	Brass	40.00
EV220B	032U7151	4	4.91	NC	G 2	50 mm	Servo	FKM	0.3 - 10 bar	Brass	40.00
EV220B	032U7175	4	4.92	NC	G 2	50 mm	Servo	NBR	0.3 - 16 bar	Brass	40.00
EV220B	032U7117	24	0.73	NO	G 1/2	15 mm	Servo	EPDM	0.3 - 16 bar	Brass	4.00
EV220B	032U7180	24	0.73	NO	G 1/2	15 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00
EV220B	032U7122	24	0.91	NO	G 3/4	20 mm	Servo	EPDM	0.3 - 16 bar	Brass	8.00
EV220B	032U7181	24	0.88	NO	G 3/4	20 mm	Servo	NBR	0.3 - 16 bar	Brass	8.00
EV220B	032U7127	12	1.38	NO	G 1	25 mm	Servo	EPDM	0.3 - 16 bar	Brass	11.00
EV220B	032U7182	12	1.43	NO	G 1	25 mm	Servo	NBR	0.3 - 16 bar	Brass	11.00
EV220B	032U7134	9	2.05	NO	G 1 1/4	32 mm	Servo	EPDM	0.3 - 16 bar	Brass	18.00
EV220B	032U7183	9	2.05	NO	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00
EV220B	032U7142	6	3.12	NO	G 1 1/2	40 mm	Servo	EPDM	0.3 - 16 bar	Brass	24.00
EV220B	032U7184	6	3.15	NO	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00
EV220B	032U7152	4	4.91	NO	G 2	50 mm	Servo	EPDM	0.3 - 16 bar	Brass	40.00
EV220B	032U7185	4	4.91	NO	G 2	50 mm	Servo	NBR	0.3 - 16 bar	Brass	40.00

EV225B Servo-operated 2/2-way solenoid valves for steam



EV225B is a servo-operated 2/2-way solenoid valve for use in steam application. The design is based on a PTFE diaphragm concept, ensuring high reliable function even in connection with contaminated steam.

Valve body in dezincification resistant brass and valve seats made in stainless steel for ensuring a long life even in connection with aggressive steam media. Coil type BR can be used on EV225B.

- 2/2-way
- Specifically designed for steam applications
- Servo-operated
- DN 6 - DN 25
- G 1/4" to G 1"
- DZR brass valve body
- NC (normally closed)
- ISO 228/1 or UL listed version with NPT for North America (EVSIS)

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV225B	032U300399	8	0.50	NC	G 3/8	10 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	2.20
EV225B	032U300499	15	0.45	NC	G 1/2	10 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	2.20
EV225B	032U300599	12	0.66	NC	G 1/2	15 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	3.00
EV225B	032U300699	12	1.21	NC	G 3/4	20 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	5.00
EV225B	032U300799	12	1.42	NC	G 1	25 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	6.00

EV250B Assisted lift operated 2/2-way solenoid valves



EV250B with assisted lift can operate from zero and up to 10 bar differential pressure.

This 2/2-way valve program is especially to use in closed circuits with low differential pressure, but demanding moderate flow rates. Valve body in dezincification resistant brass for ensuring a long life even in connection with aggressive steam media.

EV250B is compatible with the broad Danfoss coil program with enclosures from IP00 up to IP67. Medium temperatures up to 140 °C (low pressure steam).

- 2/2-way
- assisted lift operated
- DN 10 - DN 22
- DZR brass valve body
- NC (normally closed) or NO (normally open)
- From zero differential pressure
- Especially suitable for closed circuits and for emptying tanks
- Available with WRAS, VA and UL approvals
- ISO or NPT thread connections

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV250B	032U5250	24	0.63	NC	G 3/8	10 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	2.50
EV250B	032U5251	24	0.62	NC	G 3/8	10 mm	Assisted lift	FKM	0 - 10 bar	DZR brass	2.50
EV250B	032U5252	24	0.59	NC	G 1/2	12 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	4.00
EV250B	032U5253	24	0.62	NC	G 1/2	12 mm	Assisted lift	FKM	0 - 10 bar	DZR brass	4.00
EV250B	032U5254	12	0.87	NC	G 3/4	18 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	6.00
EV250B	032U5255	12	0.88	NC	G 3/4	18 mm	Assisted lift	FKM	0 - 10 bar	DZR brass	6.00
EV250B	032U5256	12	1.8	NC	G 1	22 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	7.00
EV250B	032U5257	12	1.9	NC	G 1	22 mm	Assisted lift	FKM	0 - 10 bar	DZR brass	7.00
EV250B	032U5350	24	0.62	NO	G 3/8	10 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	2.50
EV250B	032U5352	1	0.58	NO	G 1/2	12 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	4.00
EV250B	032U5354	1	0.88	NO	G 3/4	18 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	6.00
EV250B	032U5356	1	-	NO	G 1	20 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	7.00

EV310B Direct-operated 3/2-way solenoid valves



EV310B covers a wide range of direct-operated 3/2-way solenoid valves for universal use.

EV310B is a real robust valve program with high performance and can be used in all kind of tough working conditions.

Clip-on coils can not be used on EV310B.

- 3/2-way
- Direct-operated
- DN 1.5 - DN 3.5
- Brass valve body
- Thread (G 1/8" to G 3/8") or flange (32x32 mm) connections
- NC (normally closed) and NO (normally open) versions
- Manual override versions

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h
EV310B	032U4901	16	0.34	NC	G 1/8	2 mm	Direct	FKM	0 - 16 bar	Brass	0.15
EV310B	032U4904	16	0.33	NC	G 1/4	2 mm	Direct	FKM	0 - 16 bar	Brass	0.15
EV310B	032U4919	16	0.34	NC	G 1/4	2 mm	Direct	FKM	0 - 16 bar	Brass	0.15

Complete valves, Type EV220B, EV210B, EV225B and EV250B



Our solenoid valve program includes valves suitable for most open and closed systems. The program comes complete with the clip-on coil and IP65 electrical plug and has been carefully designed to simplify product selection. Appendix "02" for 24 V dc, "16"/"82" for 24 V ac and "31" / "84" for 230 V ac

To select the right valve all that is required to be known is:

- Open or closed pipe work system
- Pipe size
- Electrical voltage

If the system parameters are unknown, choose the safe solution - EV250B NO or NC version

Type	Code No	Pack Size	Weight [kg]	Function	Connection	Orifice size	Operation	Seal mat.	Diff. pressure [bar]	Body mat.	Kv m ³ /h	Coil voltage
EV210B	032U145816	24	0.50	NC	G 1/8	1.5 mm	Direct	FKM	0 - 30 bar	Brass	0.08	24 V ac
EV210B	032U145831	24	0.50	NC	G 1/8	1.5 mm	Direct	FKM	0 - 30 bar	Brass	0.08	230 V ac
EV210B	032U147002	24	0.55	NC	G 1/4	3 mm	Direct	FKM	0 - 20 bar	Brass	0.30	24 V dc
EV210B	032U147016	24	0.53	NC	G 1/4	3 mm	Direct	FKM	0 - 20 bar	Brass	0.30	24 V ac
EV210B	032U147031	24	0.53	NC	G 1/4	3 mm	Direct	FKM	0 - 20 bar	Brass	0.30	230 V ac
EV210B	032U146131	24	0.50	NC	G 3/8	3 mm	Direct	NBR	0 - 10 bar	Brass	0.30	230 V ac
EV210B	032U148002	24	0.54	NC	G 3/8	4.5 mm	Direct	FKM	0 - 10 bar	Brass	0.55	24 V dc
EV210B	032U148016	24	0.50	NC	G 3/8	4.5 mm	Direct	FKM	0 - 10 bar	Brass	0.55	24 V ac
EV210B	032U148031	24	0.51	NC	G 3/8	4.5 mm	Direct	FKM	0 - 10 bar	Brass	0.55	230 V ac

EV220B	032U151802	20	0.70	NC	G 3/8	10 mm	Servo	NBR	0.1 - 30 bar	Brass	1.50	24 V dc
EV220B	032U151816	20	0.67	NC	G 3/8	10 mm	Servo	NBR	0.1 - 30 bar	Brass	1.50	24 V ac
EV220B	032U151831	20	0.66	NC	G 3/8	10 mm	Servo	NBR	0.1 - 30 bar	Brass	1.50	230 V ac
EV220B	032U153802	12	0.69	NC	G 1/2	12 mm	Servo	NBR	0.3 - 10 bar	Brass	2.50	24 V dc
EV220B	032U153816	12	0.64	NC	G 1/2	12 mm	Servo	NBR	0.3 - 10 bar	Brass	2.50	24 V ac
EV220B	032U153831	12	0.65	NC	G 1/2	12 mm	Servo	NBR	0.3 - 10 bar	Brass	2.50	230 V ac
EV220B	032U528602	24	-	NC	G 3/4	18 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	24 V dc
EV220B	032U528616	24	0.01	NC	G 3/4	18 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	24 V ac
EV220B	032U528631	24	0.99	NC	G 3/4	18 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	230 V ac
EV220B	032U528702	12	1.27	NC	G 1	22 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	24 V dc
EV220B	032U528716	12	-	NC	G 1	22 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	24 V ac
EV220B	032U528731	12	1.25	NC	G 1	22 mm	Servo	NBR	0.3 - 10 bar	Brass	6.00	230 V ac
EV220B	032U451402	12	1.03	NC	G 1/2	15 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00	24 V dc
EV220B	032U451416	12	1.01	NC	G 1/2	15 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00	24 V ac
EV220B	032U451431	12	1.02	NC	G 1/2	15 mm	Servo	NBR	0.3 - 16 bar	Brass	4.00	230 V ac
EV220B	032U453002	12	1.22	NC	G 3/4	20 mm	Servo	NBR	0.3 - 16 bar	Brass	8.00	24 V dc
EV220B	032U453016	12	1.18	NC	G 3/4	20 mm	Servo	NBR	0.3 - 16 bar	Brass	8.00	24 V ac
EV220B	032U453031	12	1.20	NC	G 3/4	20 mm	Servo	NBR	0.3 - 16 bar	Brass	8.00	230 V ac
EV220B	032U453402	12	1.69	NC	G 1	25 mm	Servo	NBR	0.3 - 16 bar	Brass	11.00	24 V dc
EV220B	032U453416	12	1.65	NC	G 1	25 mm	Servo	NBR	0.3 - 16 bar	Brass	11.00	24 V ac
EV220B	032U453431	12	1.68	NC	G 1	25 mm	Servo	NBR	0.3 - 16 bar	Brass	11.00	230 V ac
EV220B	032U456802	1	2.35	NC	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00	24 V dc
EV220B	032U456816	1	2.33	NC	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00	24 V ac
EV220B	032U456831	1	2.35	NC	G 1 1/4	32 mm	Servo	NBR	0.3 - 16 bar	Brass	18.00	230 V ac
EV220B	032U458502	1	3.46	NC	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	24 V dc
EV220B	032U458516	1	3.42	NC	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	24 V ac
EV220B	032U458531	1	3.50	NC	G 1 1/2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	230 V ac
EV220B	032U460402	1	5.21	NC	G 2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	24 V dc
EV220B	032U460416	1	5.19	NC	G 2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	24 V ac
EV220B	032U460431	1	5.21	NC	G 2	40 mm	Servo	NBR	0.3 - 16 bar	Brass	24.00	230 V ac

EV225B	032U300484	8	0.89	NC	G 1/2	10 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	2.20	230 V ac
EV225B	032U300584	8	1.06	NC	G 1/2	15 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	3.00	230 V ac
EV225B	032U300682	6	1.70	NC	G 3/4	20 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	5.00	24 V ac
EV225B	032U300684	6	1.66	NC	G 3/4	20 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	5.00	230 V ac
EV225B	032U300784	6	1.86	NC	G 1	25 mm	Servo	PTFE	0.2 - 10 bar	DZR brass	6.00	230 V ac

EV250B	032U157102	24	0.94	NC	G 3/8	10 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	2.50	24 V dc
EV250B	032U157116	24	0.92	NC	G 3/8	10 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	2.50	24 V ac
EV250B	032U157131	24	0.94	NC	G 3/8	10 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	2.50	230 V ac
EV250B	032U158002	24	0.91	NC	G 1/2	12 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	4.00	24 V dc
EV250B	032U158016	24	0.87	NC	G 1/2	12 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	4.00	24 V ac
EV250B	032U158031	24	0.88	NC	G 1/2	12 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	4.00	230 V ac
EV250B	032U161402	12	1.17	NC	G 3/4	18 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	6.00	24 V dc
EV250B	032U161416	12	1.15	NC	G 3/4	18 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	6.00	24 V ac
EV250B	032U161431	12	1.16	NC	G 3/4	18 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	6.00	230 V ac
EV250B	032U162402	12	1.41	NC	G 1	22 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	7.00	24 V dc
EV250B	032U162416	12	1.41	NC	G 1	22 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	7.00	24 V ac
EV250B	032U162431	12	1.38	NC	G 1	22 mm	Assisted lift	EPDM	0 - 10 bar	DZR brass	7.00	230 V ac
EV250B	032U537231	24	0.86	NO	G 1/2	12 mm	Servo	EPDM	0 - 10 bar	DZR brass	-	230 V ac
EV250B	032U537431	24	-	NO	G 3/4	18 mm	Servo	EPDM	0 - 10 bar	DZR brass	-	230 V ac
EV250B	032U537631	24	1.40	NO	G 1	20 mm	Servo	EPDM	0 - 10 bar	DZR brass	-	230 V ac

Accessories & spare parts - solenoid valves

Spare part kits - for EV210B



Type	Code No	Pack Size	Weight [kg]	Application
Spare parts	032U1060	10	0.03	EV210B 1.5-3 NBR

Spare part kits - for EV220B



Type	Code No	Pack Size	Weight [kg]	Application
Spare parts	032U0296	20	0.10	EV220B 15-50 EPDM
Spare parts	032U1065	10	0.04	EV220B EPDM
Spare parts	032U1066	10	0.04	EV220B FKM
Spare parts	032U1068	10	0.04	EV220B 12 EPDM
Spare parts	032U1071	10	0.04	EV220B 15 EPDM
Spare parts	032U1072	10	0.04	EV220B 15 FKM
Spare parts	032U1070	10	0.05	EV220B 18 EPDM
Spare parts	032U1073	10	0.05	EV220B 20 EPDM
Spare parts	032U1074	10	0.05	EV220B 20 FKM
Spare parts	032U1075	10	0.08	EV220B 25 EPDM
Spare parts	032U1076	10	0.8	EV220B 25 FKM
Spare parts	032U6015	5	0.08	EV220B 25B NBR
Spare parts	032U1077	10	0.10	EV220B 32 EPDM
Spare parts	032U1078	5	0.11	EV220B 32 FKM
Spare parts	032U1079	5	0.16	EV220B 40 EPDM
Spare parts	032U1080	5	0.17	EV220B 40 FKM
Spare parts	032U1081	10	0.26	EV220B 50 EPDM
Spare parts	032U1082	5	0.27	EV220B 50 FKM
Spare parts	032U1063	10	0.04	EV220B 6 FKM

Spare part kits - for EV225B



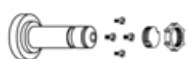
Type	Code No	Pack Size	Weight [kg]	Application
Spare parts	032U3172	10	0.05	EV225 15 PTFE
Spare parts	032U3173	10	0.08	EV225 20 PTFE
Spare parts	032U3171	12	0.04	EV225 6-10 PTFE

Spare part kits - for EV250B



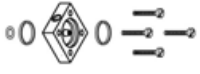
Type	Code No	Pack Size	Weight [kg]	Application
Spare parts	032u5271	20	0.07	EV250B 10-12BD FKM
Spare parts	032u5273	18	0.07	EV250B 18-22BD FKM
Spare parts	032u5315	15	0.29	EV250B NC 10-12 BD EPDM
Spare parts	032u5317	12	0.32	EV250B NC 18-22BD EPDM

Isolating diaphragm kits - for solenoid valves



Type	Code No	Pack Size	Weight [kg]	Description	Application
Spare parts	042U1010	50	0.13	Isolating diaphragm	EV212B 1.5, EV222B 15-50 FKM
Spare parts	042U1009	50	0.12	Isolating diaphragm	EV222 15-50 EPDM

Manual override kits - for solenoid valves



Type	Code No	Pack Size	Weight [kg]	Description	Application
Spare parts	032U0150	90	0.13	Manuel opening unit	EV220B 15-50 Brass

Coils for valves

Danfoss solenoid valves and coils are usually ordered separately to allow maximum flexibility, enabling you to select a valve and coil combination to best suit your needs.

The Danfoss coil program consists of both the easy-to-handle Clip-On system and traditional coils with threaded fastener. Also, with approvals such as EEx/ATEX and UL, we offer a wide range of application specific coils for e.g. steam or hazardous areas.



AB Compact coils



Compact coil with low power consumption for valve range A; 4.5W ac / 5W dc

- Compact
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +50°C
- All usual ac and dc voltages
- IP 00 version with 6.3 x 0.8 mm spade connectors
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
AB024C	042N0802	24	0.06	4.5 W	24 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AB230C	042N0800	24	0.06	4.5 W	230 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AB024D	042N0803	24	0.06	5 W	-	24.0 V	D.C.	-40 - 50 °C	DIN	IP 00	9 mm

AC Compact coils



Compact coil with high power consumption for valve range A; 7W ac / 10W dc

- Compact
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +50°C
- IP 00 version with 6.3 x 0.8 mm spade connectors
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
AC230C	042N0821	24	0.06	7 W	230 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AC024C	042N0823	24	0.06	7 W	24 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AC024D	042N0824	24	0.06	10 W	-	24.0 V	D.C.	-40 - 50 °C	DIN	IP 00	9 mm

AK Compact coils



Compact coil for valve range A; 3W dc

- Compact
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +50°C
- IP 00 version with terminals DIN 43650 form A
- IP 20 version with protective cap
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
AK024D	042N0844	24	0.11	3 W	-	24.0 V	D.C.	-40 - 50 °C	DIN	IP 00	9 mm

AM Compact coils



Compact coil for valve range A, 7.5W ac / 9.5W dc

- Compact
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +50°C
- IP 00 version with terminals DIN 43650 form A
- IP 20 version with protective cap
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
AM024C	042N0842	24	0.11	7.5 W	24 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AM230C	042N0840	24	0.11	7.5 W	230 V	-	50/60 HZ	-40 - 50 °C	DIN	IP 00	9 mm
AM012D	042N0848	24	0.11	9.5 W	-	12.0 V	D.C.	-40 - 50 °C	DIN	IP 00	9 mm
AM024D	042N0843	24	0.12	9.5 W	-	24.0 V	D.C.	-40 - 50 °C	DIN	IP 00	9 mm

BA High performance coils



Non-demanding applications, with IP65, for valve range B, 9W ac / 15W dc

- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +40°C
- IP 00 version with DIN 43650 A spade connectors
- IP 20 version with protective cap
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BA024A	042N7508	84	0.18	9 W	24 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA048A	042N7510	84	0.17	9 W	48 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA115A	042N7512	84	0.16	9 W	115 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA230A	042N7501	84	0.17	9 W	220 - 230 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA240A	042N7502	84	0.15	9 W	240 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA400A	042N7504	84	0.17	9 W	380 - 400 V	-	50 HZ	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA012D	042N7550	84	0.19	15 W	-	12.0 V	D.C.	-40 - 40 °C	DIN Spade	IP 00	13.5 mm
BA024D	042N7551	84	0.19	15 W	-	24.0 V	D.C.	-40 - 40 °C	DIN Spade	IP 00	13.5 mm

BB High performance coils



Demanding applications, with IP65, for valve range B, 10W ac / 18W dc

- Clip-on system for fast, easy fitting and removal
- Windings of class H insulated wire moulded in the coil body
- Ambient temperature: Up to +80°C
- IP 00 version with DIN 43650 A spade connectors
- IP 20 version with protective cap
- IP 65 version with mounted cable plug

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BB024AS	018F7358	50	0.26	10 W	24 V	-	50 HZ	-40 - 80 °C	DIN Spade	IP 00	13.5 mm
BB024BS	018F7365	50	0.26	10 W	24 V	-	60 HZ	-40 - 80 °C	DIN Spade	-	13.5 mm
BB110CS	018F7360	50	0.27	10 W	110 V	-	50/60 HZ	-40 - 50 °C	DIN Spade	IP 00	13.5 mm
BB115AS	018F7361	50	0.27	10 W	115 V	-	50 HZ	-40 - 80 °C	DIN Spade	IP 00	13.5 mm
BB230AS	018F7351	50	0.27	10 W	230 V	-	50 HZ	-40 - 80 °C	DIN Spade	IP 00	13.5 mm
BB230CS	018F7363	50	0.28	10 W	230 V	-	50/60 HZ	-40 - 50 °C	DIN Spade	IP 00	13.5 mm
BB240AS	018F7352	50	0.27	10 W	240 V	-	50 HZ	-40 - 80 °C	DIN Spade	IP 00	13.5 mm
BB400AS	018F7353	50	0.26	10 W	380 - 400 V	-	50 HZ	-40 - 80 °C	DIN Spade	IP 00	13.5 mm
BB012DS	018F7396	50	0.27	18 W	-	12.0 V	D.C.	-40 - 50 °C	DIN Spade	IP 00	13.5 mm
BB024DS	018F7397	50	0.28	18 W	-	24.0 V	D.C.	-40 - 50 °C	DIN Spade	IP 00	13.5 mm

BE High performance coils



Demanding applications, with IP67, for valve range B, 10W ac / 18W dc, IP67

- Clip-on system for fast, easy fitting and removal
- Encapsulated coils with long operation life
- Ambient temperature: Up to +80°C
- IP 67 for moist environments with terminal box

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BE024AS	018F6707	32	0.31	10 W	24 V	-	50 HZ	-40 - 80 °C	Connection Box	IP 67	13.5 mm
BE230AS	018F6701	32	0.32	10 W	220 - 230 V	-	50 HZ	-40 - 80 °C	Connection Box	IP 67	13.5 mm
BE230CS	018F6732	32	0.33	10 W	220 - 230 V	-	50/60 HZ	-40 - 50 °C	Connection Box	IP 67	13.5 mm
BE240AS	018F6702	32	0.33	10 W	240 V	-	50 HZ	-40 - 80 °C	Connection Box	IP 67	13.5 mm
BE024DS	018F6757	32	0.34	18 W	-	24.0 V	D.C.	-40 - 50 °C	Connection Box	IP 67	13.5 mm

BG High performance coils



Tough applications, with IP67, 12W ac / 20W dc, IP67

- Clip-on system for fast, easy fitting and removal
- Encapsulated coils with long operation life
- Ambient temperature: Up to +80°C
- IP 67 for moist environments with terminal box

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BG024DS	018F6857	24	0.60	20 W	24.0 V	D.C. I	-40 - 50 °C	Connection Box	IP 67	13.5 mm

BL High performance proportional coils



Special coil only for proportional valves, for valve range B, 4-20 mA pilot signal

- Max. 20W power
- Class H insulation of coil windings
- Ambient temperature: -25°C to +50°C
- IP67 coil enclosure with 3-core cable
- Supply voltage: 21-30V dc

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V dc]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BL024D	018Z0291	12	0.82	20 W	24.0 V	-40 - 50 °C	Cable	IP67	13.5 mm

BM High performance proportional coils



Special coil only for proportional valves, for valve range B, 0-10 V pilot signal

- Max. 20W power
- Class H insulation of coil windings
- Ambient temperature: -25°C to +50°C
- IP67 coil enclosure with 3-core cable
- Supply voltage: 21-30V dc

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V dc]	Coil conn.	IP	Armature tube size
BM024D	018Z0290	12	0.83	20 W	24.0 V	Cable	IP67	13.5 mm

BN High performance hum-free coils



Hum-free coil for valve range B, with extra low noise level , 20W ac, IP67

- Clip-on system for fast, easy fitting and removal
- Hum-free for installations sensitive to noise, such as heating systems
- Built-in rectifier
- Encapsulated coils with long operation life
- Ambient temperature: Up to +50°C
- IP 67 for moist environments with flying lead

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BN230C	018F7301	12	0.68	20 W	230 V	50/60 HZ	-40 - 50 °C	Cable	IP 67	13.5 mm

BR High performance coils for steam



High Performance coils for steam valves, 10W ac / 17W dc

- IP43 coil enclosure (IEC 529)
- Terminal box
- Class H insulation of coil windings (IEC 85)
- Ambient temperature: Max. +40° C

Type	Code No	Pack Size	Weight [kg]	Power cons. [W]	Voltage [V ac]	Voltage [V dc]	Freq. [Hz]	Ambient temp. [°C]	Coil conn.	IP	Armature tube size
BR024A	032K143682	18	0.46	10 W	24 V	-	50HZ	-10 - 40 °C	Cable for box	IP43	13.5 mm
BR230A	032K143684	18	0.41	10 W	230 V	-	50HZ	-10 - 40 °C	Cable for box	IP43	13.5 mm
BR240A	032K143685	18	0.42	10 W	240 V	-	50HZ	-10 - 40 °C	Cable for box	IP43	13.5 mm
BR024D	032K140902	18	0.61	17 W	-	24.0 V	D.C.	-10 - 40 °C	Cable for box	IP43	13.5 mm

Accessories & spare parts - coils

Cable plugs - for coils



Type	Code No	Pack Size	Weight [kg]	El. conn.	Voltage [V ac]	Voltage [V dc]	Encl.	Ambient temp. [°C]	Cable dia.	Contacts	Coil type
-	042N0139	100	0.03	11 mm (industrial std)	250 V	250.0 V	IP65	-40 - 176 °F / -40 - 80 °C	0.18 - 0.28 in / 4.5 - 7.0 mm	2 + PE	AB, AC
-	042N0156	100	0.03	DIN 43650-A, plug Pg 11	250 V	250.0 V	IP65	-40 - 176 °F / -40 - 80 °C	0.24 - 0.35 in / 6.0 - 9.0 mm	2 + PE	BA, BB, AM

Thermostatically operated valves

Thermostatically operated valves are a simple and reliable control solution requiring neither electricity nor control air. An example of application is automatic control of water temperature in cooling systems. The valves are available with remote or built-in sensor.

AVTA Thermostatically operated valves with temperature sensitive sensor



AVTA is a self-acting, thermostatically operated valve for use in cooling applications. The valve is commonly used in connection with hydraulic stations, and is often named the "fit and forget" valve, due to its immense reliability, proven throughout decades.

- Self-acting cooling water valves for accurate flow control based on sensor temperature
- Capillary sensor with adsorption charge, mass charge or universal charge
- Open on rising temperature
- Brass or stainless steel valve body
- For extremely aggressive media, also available in titanium (please contact us)

Type	Code No	Pack Size	Weight [kg]	Sensor temp. range [°C]	Connection	Orifice size	Body mat.	Medium temp. range [°C]	Charge	Capillary tube length [mm]	Kv m ³ /h
AVTA	003N2132	10	1.65	0 - 30 °C	G 1/2	15 mm	Brass	-25 - 130 °C	Universal	2.000 mm	1.90
AVTA	003N3132	10	1.70	0 - 30 °C	G 3/4	20 mm	Brass	-25 - 130 °C	Universal	2.000 mm	3.40
AVTA	003N4132	10	1.84	0 - 30 °C	G 1	25 mm	Brass	-25 - 130 °C	Universal	2.000 mm	5.50
AVTA	003N1144	10	1.58	10 - 80 °C	G 3/8	10 mm	Brass	-25 - 130 °C	Adsorption	2.300 mm	1.40
AVTA	003N0107	10	1.51	10 - 80 °C	G 1/2	15 mm	Brass	-25 - 130 °C	Adsorption	2.300 mm	1.90
AVTA	003N0108	10	1.56	10 - 80 °C	G 3/4	20 mm	Brass	-25 - 130 °C	Adsorption	2.300 mm	3.40
AVTA	003N0109	10	1.70	10 - 80 °C	G 1	25 mm	Brass	-25 - 130 °C	Adsorption	2.300 mm	5.50
AVTA	003N4150	10	1.64	10 - 80 °C	G 1	25 mm	Stainless steel	-25 - 130 °C	Adsorption	2.300 mm	5.50
AVTA	003N1162	10	1.69	25 - 65 °C	G 3/8	10 mm	Brass	-25 - 130 °C	Universal	2.000 mm	1.40
AVTA	003N0045	10	1.53	25 - 65 °C	G 1/2	15 mm	Brass	-25 - 130 °C	Mass	2.000 mm	1.90
AVTA	003N2162	10	1.64	25 - 65 °C	G 1/2	15 mm	Brass	-25 - 130 °C	Universal	2.000 mm	1.90
AVTA	003N0046	10	1.60	25 - 65 °C	G 3/4	20 mm	Brass	-25 - 130 °C	Mass	2.000 mm	3.40
AVTA	003N3162	10	1.70	25 - 65 °C	G 3/4	20 mm	Brass	-25 - 130 °C	Universal	2.000 mm	3.40
AVTA	003N0047	10	1.65	25 - 65 °C	G 1	25 mm	Brass	-25 - 130 °C	Mass	2.000 mm	5.50
AVTA	003N4162	10	1.81	25 - 65 °C	G 1	25 mm	Brass	-25 - 130 °C	Universal	2.000 mm	5.50
AVTA	003N2182	10	1.64	50 - 90 °C	G 1/2	15 mm	Brass	-25 - 130 °C	Universal	2.000 mm	1.90
AVTA	003N3182	10	1.69	50 - 90 °C	G 3/4	20 mm	Brass	-25 - 130 °C	Universal	2.000 mm	3.40
AVTA	003N4182	10	1.84	50 - 90 °C	G 1	25 mm	Brass	-25 - 130 °C	Universal	2.000 mm	5.50

Accessories & spare parts - thermostatically operated valves

Service sensor elements - for AVTA



Type	Code No	Pack Size	Weight [kg]	Cap. tube length (EO) [mm]	Sensor temp. range [°C]	Sensor diameter [Ø mm]	Application
Spare part	003N0075	20	0.46	2.000 mm	0 - 30 °C	18.0 mm	AVTA
Spare part	003N0078	20	0.43	2.000 mm	20 - 65 °C	18.0 mm	AVTA
Spare part	003N0091	20	0.35	2.000 mm	20 - 65 °C	9.5 mm	AVTA
Spare part	003N0062	20	0.44	2.000 mm	50 - 90 °C	18.0 mm	AVTA

Sensor pockets - for AVTA



Type	Code No	Pack Size	Weight [kg]	Material	Sensor type	Connection	Application
Accessory	003N0050	72	0.20	Brass	Ø 18 universal	G 3/4	AVTA
Accessory	003N0192	72	0.20	Stainless steel	Ø 18 universal	G 1/2	AVTA
Accessory	003N0196	10	0.9	Stainless steel	Ø 9.5 mass charge, adsorption	G 1/2	AVTA

Capillary tube glands - for AVTA



Type	Code No	Pack Size	Weight [kg]	Application
Accessory	003N0155	50	0.11	AVTA
Accessory bag	017-422066	5	0.05	KP / RT

Miscellaneous accessories & spare parts - for thermostatically operated valves

Type	Code No	Pack Size	Weight [kg]	Application
Accessory	003N0388	10	0.05	AVTA/WV

Externally operated valves

Externally operated valves are designed for more specialised applications, such as: Media with high dirt content, media with high viscosity, high ambient temperatures, large flow quantities, damp environments and where there is a risk of explosion

AV210 Angle-seated externally operated valves








AV210 is an externally operated angle seat valve for use in robust industrial applications. The valve can operate at very high medium temperatures and viscosities, and is insensitive to dirt particles in the medium; thus, it is often called a "trouble-shooter" valve. The valve is available in gun metal (RG5/bronze) and stainless steel (AISI316).

- High capacity basic program
- 2/2-way
- Angle-seated piston
- NC version: Both closing against and with flow direction
- NO version: Closing against the flow direction
- Bronze or stainless steel valve body

Type	Code No	Pack Size	Weight [kg]	Function	Conn.	Orifice size	Operation	Seal mat.	Body mat.	Closing	Control head dia. [Ø mm]	Kv m ³ /h
AV210A	042N4400	8	0.77	NC	G 3/8	15 mm	Piston (angle)	PTFE	Gun metal	Against flow	40 mm	4.50
AV210A	042N4402	8	0.74	NC	G 1/2	15 mm	Piston (angle)	PTFE	Gun metal	Against flow	40 mm	5.30
AV210B	042N4451	8	1.16	NC	G 1/2	15 mm	Piston (angle)	PTFE	Stainless steel	Against flow	50 mm	5.70
AV210B	042N4404	8	1.29	NC	G 3/4	20 mm	Piston (angle)	PTFE	Gun metal	Against flow	50 mm	10.00
AV210B	042N4452	8	1.36	NC	G 3/4	20 mm	Piston (angle)	PTFE	Stainless steel	Against flow	50 mm	10.00
AV210C	042N4453	4	1.79	NC	G 3/4	20 mm	Piston (angle)	PTFE	Stainless steel	Against flow	63 mm	10.00
AV210C	042N4406	4	2.13	NC	G 1	25 mm	Piston (angle)	PTFE	Gun metal	Against flow	63 mm	20.00
AV210C	042N4454	4	2.03	NC	G 1	25 mm	Piston (angle)	PTFE	Stainless steel	Against flow	63 mm	20.00
AV210D	042N4455	4	3.50	NC	G 1	25 mm	Piston (angle)	PTFE	Stainless steel	Against flow	90 mm	20.00
AV210D	042N4408	4	4.01	NC	G 1 1/4	32 mm	Piston (angle)	PTFE	Gun metal	Against flow	90 mm	29.00
AV210D	042N4409	4	4.57	NC	G 1 1/2	40 mm	Piston (angle)	PTFE	Gun metal	Against flow	90 mm	46.00
AV210E	042N4411	32	7.9	NC	G 2	50 mm	Piston (angle)	PTFE	Gun metal	Against flow	110 mm	67.00

Pressure switches

Type	RT for general use	RT TÜV approved for steam plant	KPS heavy-duty	CAS heavy-duty	KP for light industry	KPI for light industry	CS for air and water	MBC 5000 block-type, compact	MBC 5100 block-type, compact with ship approvals
Pages	18	18	18	19	19	19	20	20	20
									
Pressure range	-1 - 30 bar	0 - 25 bar	0 - 60 bar	0 - 60 bar	-0.2 - 14 bar	-0.2 - 28 bar	2 - 20 bar	-0.2 - 400 bar	-0.2 - 100 bar
Connection size	G 3/8 A	G 1/2 A	G 1/4 A - G 3/8 A	G 1/4 A	G 1/4 A	G 1/4 A	G 1/4 A - G 1/2 A	G 1/4 A	G 1/4 A
Connection type	Pipe thread	Pipe thread	Pipe thread	Pipe thread	Pipe thread	Pipe thread	Pipe thread	Flange / Pipe thread	Flange / Pipe thread
Contact function	SPDT	SPDT	SPDT gold	SPDT	SPDT	SPDT	TPST	SPDT	SPDT
Max. working pressure	0.4 - 42 bar	7 - 42 bar	6 - 120 bar	10 - 120 bar	17 bar	18 - 30 bar	6 - 20 bar	15 - 600 bar	15 - 150 bar

Pressure Monitoring & Control

Pressure switches, single

The range of pressure switches includes components for general industrial use as well as specialised switches for demanding applications.

RT Pressure switches for general use



RT switches are used in general industrial and marine sectors. The RT single pressure switches series consist of a variety of ordinary controls including neutral zone pressure switches, safety pressure switches for steam boiler plant, and gold plated fail-safe controls for applications in which safety or economical consequences are critical factors. RT switches have been in service for more than 60 years.

- Pressure ranges: -1 to 30 bar
- Replaceable contact system
- Also available with gold plated contact systems
- Fail-safe
- Adjustable differential
- Enclosure IP66
- Available with min. and max. reset function (IP54)
- Also available as differential switch
- Available with TÜV approvals and with dead zone
- Available with all relevant marine approvals

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Reset
RT121	017-521566	15	0.96	-1.0 - 0.0 bar	0.09 - 0.40 bar	7.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT113	017-519666	9	0.99	0.0 - 0.3 bar	0.01 - 0.05 bar	0.4 bar	G 3/8 A	Pipe thread	SPDT	-
RT112	017-519166	15	0.96	0.1 - 1.1 bar	0.07 - 0.16 bar	7.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT112	017-519266	15	0.98	0.1 - 1.1 bar	0.07 bar	7.0 bar	G 3/8 A	Pipe thread	SPDT	Max
RT110	017-529166	15	0.98	0.2 - 3.0 bar	0.08 - 0.25 bar	7.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT200	017-523766	15	0.96	0.2 - 6.0 bar	0.25 - 1.20 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT200	017-523866	15	0.97	0.2 - 6.0 bar	0.25 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	Max
RT200	017-523966	15	0.97	0.2 - 6.0 bar	0.25 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	Min
RT116	017-520366	15	0.97	1.0 - 10.0 bar	0.33 - 1.30 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT116	017-520466	15	0.97	1.0 - 10.0 bar	0.33 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	Max
RT5	017-525566	15	1.02	4.0 - 17.0 bar	1.20 - 4.00 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT	-
RT117	017-529566	15	1.02	10.0 - 30.0 bar	1.00 - 4.00 bar	42.0 bar	G 3/8 A	Pipe thread	SPDT	-

RT Pressure switches, TÜV approved for steam plant



TÜV approved RT switches are used in steam plant. The RT single pressure switches series consist of a variety of ordinary controls including neutral zone pressure switches, safety pressure switches for steam boiler plant, and gold plated fail-safe controls for applications in which safety or economical consequences are critical factors. RT switches have been in service for more than 60 years.

- Pressure ranges: 0 to 25 bar
- Replaceable contact system
- Also available with gold plated contact systems
- Fail-safe
- Adjustable differential
- Enclosure IP66
- Available with min. and max. reset function (IP54)
- Available with all relevant marine approvals

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function
RT33B	017-526266	15	1.02	0.0 - 2.5 bar	0.10 bar	7.0 bar	G 1/2 A	Pipe thread	SPDT
RT30AS	017-518966	15	1.04	1.0 - 10.0 bar	0.40 bar	22.0 bar	G 1/2 A	Pipe thread	SPDT
RT30AB	017-518866	15	1.05	1.0 - 10.0 bar	0.60 bar	22.0 bar	G 1/2 A	Pipe thread	SPDT
RT30AW	017-518766	15	1.03	1.0 - 10.0 bar	0.80 bar	22.0 bar	G 1/2 A	Pipe thread	SPDT
RT31S	017-526966	15	0.96	2.0 - 10.0 bar	0.30 bar	22.0 bar	G 1/2 A	Pipe thread	SPDT
RT19B	017-518266	15	1.16	5.0 - 25.0 bar	1.00 bar	42.0 bar	G 1/2 A	Pipe thread	SPDT
RT19W	017-518166	15	1.14	5.0 - 25.0 bar	1.20 bar	42.0 bar	G 1/2 A	Pipe thread	SPDT

KPS Heavy-duty pressure switches



In the KPS series, special attention has been given to meeting important demands for a high level of enclosure, a robust, compact construction and resistance to shock and vibration. The KPS range covers most outdoor as well as indoor application requirements, and are suitable for use in alarm and regulation systems in factories, diesel plant, compressors, powerstation and on board ships.

- Pressure ranges: 0 to 60 bar
- Gold plated contact systems
- Adjustable or fixed differential
- Robust and compact construction
- Resistance to shock and vibrations
- Diaphragm version for applications with:
 - pulsations/pressure peaks
 - sea water as media
- Enclosure IP67. Sturdy and sea water resistant.
- Available with all relevant land and marine approvals

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Encl.
KPS31	060-310966	8	1.14	0.0 - 2.5 bar	0.10 bar	6.0 bar	G 3/8 A	Pipe thread	SPDT gold	IP67
KPS31	060-311066	8	1.15	0.0 - 2.5 bar	0.10 bar	6.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS33	060-310366	8	1.07	0.0 - 3.5 bar	0.20 bar	10.0 bar	G 3/8 A	Pipe thread	SPDT gold	IP67
KPS33	060-310466	8	1.06	0.0 - 3.5 bar	0.20 bar	10.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS35	060-310066	8	1.04	0.0 - 8.0 bar	0.40 - 1.50 bar	12.0 bar	G 3/8 A	Pipe thread	SPDT gold	IP67
KPS35	060-310566	8	1.03	0.0 - 8.0 bar	0.40 - 1.50 bar	12.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS35	060-310866	8	1.03	0.0 - 8.0 bar	0.40 bar	12.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS43	060-312066	8	1.19	1.0 - 10.0 bar	0.70 - 2.80 bar	120.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS45	060-312166	8	1.21	4.0 - 40.0 bar	2.20 - 11.00 bar	120.0 bar	G 1/4	Pipe thread	SPDT gold	IP67

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Encl.
KPS37	060-310166	8	1.05	6.0 - 18.0 bar	0.85 - 2.50 bar	22.0 bar	G 3/8 A	Pipe thread	SPDT gold	IP67
KPS37	060-310666	8	1.05	6.0 - 18.0 bar	0.85 - 2.50 bar	22.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS47	060-312266	8	1.21	6.0 - 60.0 bar	3.50 - 17.00 bar	120.0 bar	G 1/4	Pipe thread	SPDT gold	IP67
KPS39	060-310266	8	1.07	10.0 - 35.0 bar	2.00 - 6.00 bar	45.0 bar	G 3/8 A	Pipe thread	SPDT gold	IP67
KPS39	060-310766	8	1.05	10.0 - 35.0 bar	2.00 - 6.00 bar	45.0 bar	G 1/4	Pipe thread	SPDT gold	IP67

CAS Heavy-duty pressure switches



In the CAS pressure switches series, special attention has been given to meeting demands for a high level of enclosure, low differential, robust, compact construction and resistance to shock and vibration. The CAS series covers most outdoor as well as indoor application requirements. CAS pressure switches are suitable for use in alarm and regulation systems in factories, diesel plant, compressors, power stations and on board ships.

- Pressure ranges: 0 to 60 bar
- Low differential (fixed) micro switch
- Enclosure IP67. Sturdy and sea water resistant
- Robust and compact construction
- Resistance to shock and vibrations
- Diaphragm version applications with: Pulsations/pressure peaks and seawater as media
- Also available as differential pressure switch
- Available with all relevant land and marine approvals

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function
CAS133	060-315066	8	0.98	0.0 - 3.5 bar	0.10 bar	10.0 bar	G 1/4 A	Pipe thread	SPDT
CAS136	060-315166	8	1.01	0.0 - 10.0 bar	0.20 bar	22.0 bar	G 1/4 A	Pipe thread	SPDT
CAS143	060-316066	8	1.19	1.0 - 10.0 bar	-	120.0 bar	G 1/4 A	Pipe thread	SPDT
CAS145	060-316166	8	1.18	4.0 - 40.0 bar	-	120.0 bar	G 1/4 A	Pipe thread	SPDT
CAS147	060-316266	8	1.17	6.0 - 60.0 bar	-	120.0 bar	G 1/4 A	Pipe thread	SPDT

KP Pressure switches for light industry



Danfoss KP pressure switches are used for regulating, monitoring and alarm systems in industrial applications. The KP series are suitable for gaseous media and air. They are fitted with a single-pole switch changeover (SPDT), and can control single-phase ac motors of up to 2 kW directly.

- Pressure ranges: -0.2 to 21 bar
- High contact load - Ultra short bounce-time
- Also available with gold plated contact systems
- Media: Gaseous media and air
- Enclosure IP44 when mounted with top cover and back plate
- Also available with enclosure IP55 for OEM customers
- Small dimensions - space saving - easy to install
- Shock and impact resistant

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Encl.
KP35	060-113366	36	0.33	-0.2 - 7.5 bar	-	17.0 bar	G 1/4 A	Pipe thread	SPDT	IP30
KP35	060-538666	30	0.49	-0.2 - 7.5 bar	-	17.0 bar	G 1/4 A	Pipe thread	SPDT	IP55
KP36	060-110866	36	0.33	2.0 - 14.0 bar	0.70 - 4.00 bar	17.0 bar	G 1/4 A	Pipe thread	SPDT	IP30
KP36	060-538766	30	0.48	2.0 - 14.0 bar	0.70 - 4.00 bar	17.0 bar	G 1/4 A	Pipe thread	SPDT	IP55

KPI Pressure switches for light industry



Danfoss KPI pressure switches are used for regulating, monitoring and alarm systems in industrial applications. The KP series are suitable for plant in connection with liquid and gaseous media. They are fitted with a single-pole switch changeover (SPDT).

- Pressure ranges: -0.2 to 28 bar
- High contact load
- Ultra short bounce-time
- Available with gold plated contact systems
- Adjustable differential
- Enclosure IP44 when mounted with top cover and back plate

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Encl.
KPI35	060-121766	36	0.34	-0.2 - 8.0 bar	0.40 - 1.50 bar	18.0 bar	G 1/4 A	Pipe thread	SPDT	IP30
KPI36	060-118966	36	0.34	4.0 - 12.0 bar	0.50 - 1.60 bar	18.0 bar	G 1/4 A	Pipe thread	SPDT	IP30
KPI38	060-508166	36	0.34	8.0 - 28.0 bar	1.80 - 6.00 bar	30.0 bar	G 1/4 A	Pipe thread	SPDT	IP30

CS Pressure switches for air and water



CS pressure switches have a three-pole switch and adjustable differential. The pressure switches are fitted with a manual switch that will lock the contact system in the open position independently of the pressure in the system.

- For automatic start and stop of air compressors and water boosters
- Pressure ranges: 2 to 20 bar
- Contact system: 3-pole (standard) and 1-pole (accessory)
- Adjustable differential
- Manual switch to lock the contact system
- Relief valve (accessory)
- Enclosure IP43 or IP55
- Also available with DVGW (KTW) drinking water approval

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. min. range setting [b]	Diff. max. range setting [b]	Max. working pressure [bar] Pe	Conn. size	Contact function	Encl.
CS	031E020066	30	0.50	2.0 - 6.0 bar	0.72 - 1.00 bar	1.00 - 2.00 bar	6.0 bar	G 1/4	TPST	IP43
CS	031E020566	30	0.50	2.0 - 6.0 bar	0.72 - 1.00 bar	1.00 - 2.00 bar	6.0 bar	G 1/4	TPST	IP55
CS	031E021066	30	0.49	2.0 - 6.0 bar	0.72 - 1.00 bar	1.00 - 2.00 bar	6.0 bar	G 1/2 A	TPST	IP43
CS	031E021566	30	0.49	2.0 - 6.0 bar	0.72 - 1.00 bar	1.00 - 2.00 bar	6.0 bar	G 1/2 A	TPST	IP55
CS	031E022066	30	0.45	4.0 - 12.0 bar	1.00 - 3.00 bar	2.00 - 4.00 bar	12.0 bar	G 1/4	TPST	IP43
CS	031E022566	12	0.50	4.0 - 12.0 bar	1.00 - 3.00 bar	2.00 - 4.00 bar	12.0 bar	G 1/4	TPST	IP55
CS	031E023066	30	0.49	4.0 - 12.0 bar	1.00 - 3.00 bar	2.00 - 4.00 bar	12.0 bar	G 1/2 A	TPST	IP43
CS	031E023566	30	0.49	4.0 - 12.0 bar	1.00 - 3.00 bar	2.00 - 4.00 bar	12.0 bar	G 1/2 A	TPST	IP55
CS	031E024566	30	0.45	7.0 - 20.0 bar	2.00 - 3.50 bar	3.50 - 7.00 bar	20.0 bar	G 1/4	TPST	IP55
CS	031E025066	30	0.49	7.0 - 20.0 bar	2.00 - 3.50 bar	3.50 - 7.00 bar	20.0 bar	G 1/2 A	TPST	IP43
CS	031E025566	30	0.49	7.0 - 20.0 bar	2.00 - 3.50 bar	3.50 - 7.00 bar	20.0 bar	G 1/2 A	TPST	IP55

MBC 5000 Block-type compact pressure switches



MBC pressure switches are used in marine applications where space and reliability are the most important features. MBCs are compact pressure switches, designed according to our new block design to survive in the harsh conditions known from machine rooms onboard ships. MBCs have high vibration resistance and feature all commonly marine approvals. The fixed, but low differential guarantees accurate monitoring of critical pressures. MBV test valves can be delivered as standard option for MBC pressure switches.

- Pressure ranges: -0.2 to 400 bar
- Low differential (fixed) micro switch
- Resistant to shock and vibrations
- Enclosure IP65
- Diaphragm version for applications with pulsations/pressure peaks
- Compact design
- Low installations costs
- Fast and easy to operate
- Easy to mount on block test valve
- Available as differential pressure switch

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. min. range setting [b]	Diff. max. range setting [b]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function
MBC 5000	061B200566	32	0.29	-0.2 - 1.0 bar	0.30 bar	0.45 bar	15.0 bar	-	Flange	SPDT
MBC 5000	061B200066	32	0.29	-0.2 - 10.0 bar	0.40 bar	0.60 bar	15.0 bar	G 1/4	Pipe thread	SPDT
MBC 5000	061B301266	32	0.31	5.0 - 20.0 bar	1.00 bar	2.50 bar	150.0 bar	-	Flange	SPDT
MBC 5000	061B500266	32	0.31	16.0 - 160.0 bar	15.00 bar	30.00 bar	600.0 bar	G 1/4	Pipe thread	SPDT
MBC 5000	061B500166	32	0.30	25.0 - 250.0 bar	20.00 bar	40.00 bar	600.0 bar	G 1/4	Pipe thread	SPDT
MBC 5000	061B500066	32	0.31	40.0 - 400.0 bar	20.00 bar	50.00 bar	600.0 bar	G 1/4	Pipe thread	SPDT

MBC 5100 Block-type compact pressure switches with ship approvals



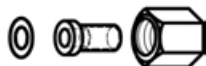
MBC pressure switches are used in marine applications where space and reliability are the most important features. MBCs are compact pressure switches, designed according to our new block design to survive in the harsh conditions known from machine rooms onboard ships. MBCs have high vibration resistance and feature all commonly marine approvals. The fixed, but low differential guarantees accurate monitoring of critical pressures. MBV test valves can be delivered as standard option for MBC pressure switches.

- All relevant marine approvals
- Pressure ranges: -0.2 to 400 bar
- Low differential (fixed) micro switch
- Resistant to shock and vibrations
- Enclosure IP65
- Diaphragm version for applications with pulsations/pressure peaks
- Compact design
- Low installations costs
- Fast and easy to operate
- Easy to mount on block test valve
- Available as differential pressure switch

Type	Code No	Pack Size	Weight [kg]	Regul. range [bar] Pe	Diff. min. range setting [b]	Diff. max. range setting [b]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function
MBC 5100	061B000566	32	0.30	-0.2 - 1.0 bar	0.30 bar	0.45 bar	15.0 bar	-	Flange	SPDT
MBC 5100	061B000466	32	0.30	-0.2 - 4.0 bar	0.30 bar	0.45 bar	15.0 bar	-	Flange	SPDT
MBC 5100	061B001066	32	0.29	-0.2 - 4.0 bar	0.30 bar	0.45 bar	15.0 bar	G 1/4	Pipe thread	SPDT
MBC 5100	061B000266	32	0.30	-0.2 - 10.0 bar	0.40 bar	0.60 bar	15.0 bar	-	Flange	SPDT
MBC 5100	061B100466	32	0.31	1.0 - 10.0 bar	1.00 bar	2.50 bar	150.0 bar	-	Flange	SPDT
MBC 5100	061B110866	32	0.32	1.0 - 10.0 bar	1.00 bar	2.50 bar	150.0 bar	G 1/4	Pipe thread	SPDT
MBC 5100	061B100266	32	0.31	5.0 - 20.0 bar	1.00 bar	2.50 bar	150.0 bar	-	Flange	SPDT
MBC 5100	061B100566	32	0.30	5.0 - 40.0 bar	2.00 bar	7.00 bar	150.0 bar	-	Flange	SPDT
MBC 5100	061B100366	32	0.31	10.0 - 100.0 bar	4.00 bar	14.00 bar	150.0 bar	-	Flange	SPDT

Accessories & spare parts - pressure switches, single

Connection adapters - for pressure switches, single



Type	Code No	Pack Size	Weight [kg]	Conn. size	Conn. type	Conn. std.	Application
Transition nipple	060-333266	20	0.06	G 1/4 A x G 3/8 A	Pipe thread	ISO 228-1	KPS / CAS

Damping coils - for pressure switches, single



Type	Code No	Pack Size	Weight [kg]	Conn. size	Conn. type	Capillary tube length [mm]	Application
Armoured damping coil	060-333366	15	0.22	G 3/8 A	Pipe thread	1.000 mm	CAS
Capillary tube gland	017-422066	5	0.05	-	-	-	KP / RT
Damping coil	060-016966	14	0.20	G 1/2 A	Pipe thread	1.000 mm	MP
Damping coil	060-104766	25	0.17	G 3/8 A	Pipe thread	1.500 mm	CAS / KP

Pressure relief valves - for pressure switches, single



Type	Code No	Pack Size	Weight [kg]	Application
Pressure relief valve	031E029866	20	0.04	CS

Miscellaneous accessories & spare parts - for pressure switches, single

Type	Code No	Pack Size	Weight [kg]	Application
3 pole contact system	031E029166	5	0.06	CS
Protective cap	017-436066	20	0.01	RT

Pressure switches, differential

The range of differential pressure switches includes components for general industrial use as well as specialised switches for demanding applications

RT Differential pressure switches



RT differential switches are used in general industrial and marine sectors. The RT differential pressure switches series consist of a variety of switches for applications in which safety or economical consequences are critical factors. RT switches have been in service for more than 60 years.

- Pressure ranges: 0 - 11 bar
- Replaceable contact system
- Available with gold plated contacts
- Fail-safe function
- Adjustable differential
- Enclosure IP66
- Available with min. and max. reset function (IP54)
- Available as general pressure switch
- Available with neutral zone
- Available with marine approvals

Type	Code No	Pack Size	Weight [kg]	Pressure range [bar] Pe	Diff. range [bar]	Max. working pressure [bar] Pe	Conn. type	Conn. size	Contact function
RT262A	017D002766	9	1.34	-1 - 10 bar	0.00 - 0.30 bar	11.0 bar	Pipe thread	G 3/8 A	SPDT (non snap action)

CAS Differential pressure switches



In the CAS pressure switches series, special attention has been given to meeting demands for a high level of enclosure, low differential, robust, compact construction and resistance to shock and vibration. The CAS series covers most outdoor as well as indoor application requirements.

- Pressure ranges: 0.2 - 2.5 bar
- Low differential (fixed) micro switch
- Enclosure IP67. Sturdy and sea water resistant
- Robust and compact construction
- Resistance to shock and vibrations
- Diaphragm version applications with: pulsations/pressure peaks
- seawater as media
- Also available as single pressure switch.
- Available with all relevant land and marine approvals .

Type	Code No	Pack Size	Weight [kg]	Operat. range LP side [bar] Pe	Diff. range [bar]	Max. working pressure [bar] Pe	Conn. size	Conn. type	Contact function	Encl.
CAS155	060-313066	8	1.65	0 - 8 bar	0.20 - 2.50 bar	22.0 bar	G 1/4	Pipe thread	SPDT	IP67

MBC 5180 Block-type differential pressure switches with ship approvals



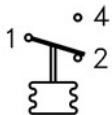
MBC 5180 differential pressure switches are used in marine applications where space and reliability are the most important features. MBCs are compact pressure switches, designed according to our new block design to survive in the harsh conditions known from machine rooms onboard ships. MBCs have high vibration resistance and feature all commonly marine approvals. The fixed, but low differential guarantees accurate monitoring of critical pressures. MBV test valves can be delivered as standard option for MBC pressure switches.

- Pressure ranges: 0.3 to 5 bar
- Adjustable differential
- Resistant to shock and vibrations
- Enclosure IP65
- Compact design
- Low installations costs
- Fast and easy to operate
- Easy to mount on block test valve

Type	Code No	Pack Size	Weight [kg]	Operat. range LP side [bar] Pe	Diff. range [bar]	Max. working pressure [bar] Pe	Conn. type	Conn. notes	Contact function
MBC 5180	061B128066	10	0.39	0 - 30 bar	0.30 - 5.00 bar	45.0 bar	Flange	With G 1/4	SPDT










Accessories & spare parts - pressure switches, differential

Contact sets - for pressure switches, differential



Type	Code No	Pack Size	Weight [kg]
RT switches	017-403066	24	0.07
RT switches	017-424066	24	0.07

Pressure transmitters

Type	MBS 33 for general industry	MBS 33M with ship approvals	MBS 3000 Compact	MBS 3050 with pulse snubber	MBS 4010 With flush dia- phragm	MBS 4510 with flush diaphragm and adjustable zero and span	MBS 5100 Block-type with ship approvals	MBS 5150 Block-type with pulse snubber and ship approvals	EMP 2 Box-type
Pages	24	24	24	25	25	25	25	26	26
									
Pressure range	0 - 400 bar	0 - 10 bar	0 - 400 bar	0 - 600 bar	0 - 16 bar	0 - 1 bar	0 - 40 bar	0 - 40 bar	-1 - 40 bar
Output signal	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA	4 - 20 mA
Voltage	10 - 30 V dc	10 - 30 V dc	10 - 30 V dc	9 - 34 V dc	10 - 30 V dc	10 - 30 V dc	10 - 32 V dc	10 - 32 V dc	11 - 32 V dc
Accuracy	± 0,3% FS	± 0,3% FS	± 0,5% FS	± 0,5% FS	± 0,3% FS	± 0,2% FS	± 0,1% FS	± 0,1% FS	± 0,5% FS
Medium temperature range	-40 - 85° C	-40 - 85° C	-40 - 85° C	-40 - 85° C	-10 - 85° C	-10 - 85° C	-40 - 85° C	-40 - 85° C	-

Pressure transmitters

Danfoss pressure transmitters help you keep demanding industrial processes under control. Accurate, robust and built for long life, they perform reliably day after day, even in the harshest environments.



MBS 33 Pressure transmitters for general industry



Pressure transmitter MBS 33 is designed for use in almost all industrial applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

The flexible pressure transmitter programme covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar and a wide range of pressure and electrical connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- A wide range of pressure connections available
- For use in severe industrial environments
- Accuracy +/-0.3% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 33	060G3006	14	0.22	Gauge (relative)	0 - 1 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3008	14	0.23	Gauge (relative)	0 - 2.50 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3009	14	0.23	Gauge (relative)	0 - 4 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3010	14	0.23	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3011	14	0.23	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3012	14	0.23	Gauge (relative)	0 - 16 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3013	14	0.23	Gauge (relative)	0 - 25 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3014	14	0.23	Gauge (relative)	0 - 40 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3015	14	0.23	Gauge (relative)	0 - 60 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3018	14	0.24	Gauge (relative)	0 - 250 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C
MBS 33	060G3019	14	0.23	Gauge (relative)	0 - 400 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 EN 837	-40 - 85 °C

MBS 33M Pressure transmitters with ship approvals



The ship approved pressure transmitter MBS 33M is designed for use in almost all marine applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

The flexible pressure transmitter programme is approved according to LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS requirements and covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar, plug and cable connections and a wide range of pressure connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent marine requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- A wide range of pressure connections available
- Available with all relevant marine applications and designed to meet the strict demands on marine equipment
- Accuracy +/-0.3% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 33M	060G3124	14	0.26	Gauge (relative)	0 - 4 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 13.5	G 1/2 EN 837	-40 - 85 °C
MBS 33M	060G3125	14	0.26	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 13.5	G 1/2 EN 837	-40 - 85 °C
MBS 33M	060G3126	14	0.26	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 13.5	G 1/2 EN 837	-40 - 85 °C

MBS 3000 Compact pressure transmitters



The compact pressure transmitter MBS 3000 is designed for use in almost all industrial applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

The flexible pressure transmitter programme covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar and a wide range of pressure- and electrical connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- Standard pressure connection G 1/4 ISO 228/1
- For use in severe industrial environments such as pumps, compressors, pneumatics and water treatment
- Accuracy +/-0.5% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 3000	060G1113	14	0.17	Gauge (relative)	0 - 1 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1122	14	0.17	Gauge (relative)	0 - 2.50 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1123	14	0.17	Gauge (relative)	0 - 4 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1124	14	0.17	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1125	14	0.17	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1133	14	0.17	Gauge (relative)	0 - 16 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1430	14	0.17	Gauge (relative)	0 - 25 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1105	14	0.17	Gauge (relative)	0 - 40 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1106	14	0.17	Gauge (relative)	0 - 60 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1107	14	0.16	Gauge (relative)	0 - 100 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1111	14	0.18	Gauge (relative)	0 - 250 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C
MBS 3000	060G1109	14	0.18	Gauge (relative)	0 - 400 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/4 EN 837	-40 - 85 °C

MBS 3050 Compact pressure transmitters with pulse snubber



The compact heavy duty pressure transmitter MBS 3050 is designed for use in hydraulic applications with severe medium influences like cavitation, liquid hammer or pressure peaks and offers a reliable pressure measurement, even under harsh environmental conditions.

The flexible pressure transmitter programme covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar and a wide range of pressure- and electrical connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- Standard pressure connection DIN 3852 - G 1/4A
- With integrated pulse-snubber
- Especially suited for hydraulic applications
- Accuracy +/-0.5% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 3050	060G1151	14	0.17	Gauge (relative)	0 - 100 bar	4 - 20 mA	9 - 34 V dc	DIN 43650-A, plug Pg 9	G 1/4 DIN3852-G Special	-40 - 85 °C
MBS 3050	060G1152	14	0.17	Gauge (relative)	0 - 160 bar	4 - 20 mA	9 - 34 V dc	DIN 43650-A, plug Pg 9	G 1/4 DIN3852-G Special	-40 - 85 °C
MBS 3050	060G1153	14	0.18	Gauge (relative)	0 - 250 bar	4 - 20 mA	9 - 34 V dc	DIN 43650-A, plug Pg 9	G 1/4 DIN3852-G Special	-40 - 85 °C
MBS 3050	060G1438	20	0.15	Gauge (relative)	0 - 400 bar	4 - 20 mA	9 - 34 V dc	M12-5 pin	G 1/4 DIN3852-G Special	-40 - 85 °C
MBS 3050	060G1408	14	0.17	Gauge (relative)	0 - 600 bar	4 - 20 mA	9 - 34 V dc	DIN 43650-A, plug Pg 9	G 1/4 DIN3852-G Special	-40 - 85 °C

MBS 4010 Pressure transmitters with flush diaphragm



The flush diaphragm pressure transmitter MBS 4010 is designed for use in almost all industrial applications with non-uniform, high viscous or crystallizing media, and offers a reliable pressure measurement, even under harsh environmental conditions.

The pressure transmitter programme covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-4 to 0-60 bar, plug and cable connections and a G1/2A pressure connection with a flush mounted diaphragm.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 60 bar
- With flush diaphragm
- For use in connection with aggressive, viscous, non-uniform and crystallizing media
- Accuracy +/-0.3% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 4010	060G3212	14	0.26	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 Flush	-10 - 85 °C
MBS 4010	060G3213	14	0.27	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 Flush	-10 - 85 °C
MBS 4010	060G3214	14	0.27	Gauge (relative)	0 - 16 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1/2 Flush	-10 - 85 °C

MBS 4510 Pressure transmitters with flush diaphragm and adjustable zero and span



The high accuracy flush diaphragm pressure transmitter MBS 4510 is designed for use in non-uniform, high viscous or crystallizing media within industry, food and beverage, and offers a reliable pressure measurement, even under harsh environmental conditions.

The pressure transmitter programme covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-250 mbar til 0-25 bar, zero point and span adjustment, plug connection and a G1A conic pressure connection with a flush mounted diaphragm.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring ranges 0 - 250 mbar to 0 - 25 bar
- Available with many different pressure connections
- With zero point and span adjustment
- With flush diaphragm
- For use in food and beverage industry as well as industrial applications with aggressive, heterogeneous and highly viscous media
- Accuracy +/-0.2% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 4510	060G2418	12	0.40	Gauge (relative)	0 - 0.25 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1 Flush	-10 - 85 °C
MBS 4510	060G2419	12	0.40	Gauge (relative)	0 - 0.40 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1 Flush	-10 - 85 °C
MBS 4510	060G2420	12	0.40	Gauge (relative)	0 - 0.60 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1 Flush	-10 - 85 °C
MBS 4510	060G2421	12	0.40	Gauge (relative)	0 - 1 bar	4 - 20 mA	10 - 30 V dc	DIN 43650-A, plug Pg 9	G 1 Flush	-10 - 85 °C

MBS 5100 Block-type pressure transmitters with ship approvals



The ship approved high accuracy pressure transmitter MBS 5100 is designed for use in almost all marine applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

The pressure transmitter programme in block design is approved according to LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS, KRS requirements, and covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar, zero point and span adjustment, plug connection and female/flange pressure connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- Pressure connect G 1/4 female
- Available with all relevant marine approvals
- Designed to meet the strict demands in marine equipment
- Accuracy +/-0.1% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 5100	060N1034	12	0.37	Gauge (relative)	0 - 4 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G 1/4 Female with flange	-40 - 85 °C
MBS 5100	060N1035	12	0.37	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G 1/4 Female with flange	-40 - 85 °C
MBS 5100	060N1036	12	0.37	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G 1/4 Female with flange	-40 - 85 °C
MBS 5100	060N1037	12	0.37	Gauge (relative)	0 - 16 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G 1/4 Female with flange	-40 - 85 °C
MBS 5100	060N1039	12	0.37	Gauge (relative)	0 - 40 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G 1/4 Female with flange	-40 - 85 °C

MBS 5150 Block-type pressure transmitters with pulse snubber and ship approvals



The ship approved high accuracy pressure transmitter MBS 5150 is designed for use in marine applications with severe medium influences like cavitation, liquid hammer or pressure peaks, and offers a reliable pressure measurement, even under harsh environmental conditions.

The pressure transmitter programme in block design is approved according to LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS, KRS requirements, and covers a 4-20 mA output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 bar, zero point and span adjustment, plug connection and female/flange pressure connections.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

- 4 - 20 mA output signal
- Operating temperature -40 to 85° C
- Measuring range 0 - 600 bar
- Pressure connect G ¼ female
- With integrated pulse-snubber
- Available with all relevant marine approvals
- Designed to meet the strict demands in marine equipment
- Accuracy +/-0.1% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.	Medium temp. range [°C]
MBS 5150	060N1063	12	0.37	Gauge (relative)	0 - 6 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G ¼ Female with flange	-40 - 85 °C
MBS 5150	060N1064	12	0.37	Gauge (relative)	0 - 10 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G ¼ Female with flange	-40 - 85 °C
MBS 5150	060N1065	12	0.37	Gauge (relative)	0 - 16 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G ¼ Female with flange	-40 - 85 °C
MBS 5150	060N1066	12	0.37	Gauge (relative)	0 - 40 bar	4 - 20 mA	10 - 32 V dc	DIN 43650-A, plug Pg 11	G ¼ Female with flange	-40 - 85 °C

EMP 2 Box-type pressure transmitters



The ship approved pressure transmitter EMP 2 is designed for use in almost all marine and industrial applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

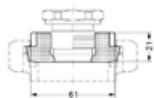
The pressure transmitter programme in box design is approved according to LR, DNV, GL, RINA, ABS, BV, NKK, PRS, MRS, KRS requirements, and covers a 4-20 mA output signal, gauge (relative) versions, measuring ranges from 0-1 to 0-400 bar, zero point and span adjustment, Pg 13,5 cable entry and different pressure connections. A robust construction enables the pressure transmitter to meet the strictest requirements.

- 4 - 20 mA output signal
- Operating temperature -10 to 70° C
- Measuring range 0 - 400 bar
- Pressure connections G ¼, G ½A standard, G ¾ A mano
- With zero point and span adjustment
- Available with all relevant marine approvals
- For use in harsh industrial / marine environments
- Accuracy +/-0.5% FS

Type	Code No	Pack Size	Weight [kg]	Pr. reference	Pressure range	Output sign.	Voltage	El. conn.	Pressure conn.
EMP 2	084G2101	8	1.06	Gauge (relative)	-1 - 5 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼
EMP 2	084G2106	8	1.8	Gauge (relative)	0 - 4 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼
EMP 2	084G2107	8	1.8	Gauge (relative)	0 - 6 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼
EMP 2	084G2109	8	1.07	Gauge (relative)	0 - 10 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼
EMP 2	084G2111	8	1.07	Gauge (relative)	0 - 16 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼
EMP 2	084G2113	8	1.07	Gauge (relative)	0 - 40 bar	4 - 20 mA	11 - 32 v dc	Terminal block / Pg 13.5	G ½ A / G ¼

Accessories & spare parts - pressure transmitters

Connection adapters - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Conn. std.	Application
Accessory bag	060-333266	20	0.06	ISO 228-1	KPS / CAS
Accessory	060G0252	6	0.11	-	MBS G 1/2
Welding nipple	060G2501	60	0.21	-	MBS 4510
Accessory	060G2505	45	0.21	DIN 11851 Dairy DN 40	MBS 4510
Accessory	060G2506	20	0.42	DIN 11851 Dairy DN 50	MBS 4510
Accessory	060G2502	45	0.16	Clamp ISO 2852 G1 1/2	MBS 4510
Accessory	060G2510	24	0.37	Clamp ISO 2852 G 2	MBS 4510
Accessory	060G2503	45	0.19	SMS 1145 G 1 1/2	MBS 4510

Damping coils - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Conn. type	Conn. size	Conn. std.	Capillary tube length [mm]	Prot. tube mat.	Application
Armoured damping coil	060-333366	15	0.22	Pipe thread	G 3/8 A	ISO 228-1	1.000 mm	-	CAS
Damping coil	060-016966	14	0.20	Pipe thread	G 1/2 A	ISO 228-1	1.000 mm	Stainless steel	MP
Damping coil	060-104766	25	0.17	Pipe thread	G 3/8 A	ISO 228-1	1.500 mm	-	CAS / KP

Plug-in displays - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Description	Electrical connection [kg]
MBD 1000	060G2850	23	0.11	Plug-in display unit MBD	EN 175301-803

MBV 2000 isolation valves - for pressure transmitters



The MBV 2000 isolation valve is designed for mounting between a Danfoss pressure transmitter and fluid-filled systems and offers a fast and efficient method of connection and removal. The isolation valve automatically closes when a pressure transmitter is removed, so transmitters can be changed easily without having to first drain a system. The valve re-opens when a transmitter is connected. The valve meets demands for fast installation, simple and effective isolation and easy connection.

- Operating pressure: Up to 600 bar
- Burst pressure: 1500 bar
- Temperature: -20° C to 200° C
- Wetted parts: All metal parts in contact with medium DIN 17440-1.4404 (AISI 316L)
- Gasket: Viton
- Designed to fit between Danfoss pressure transmitters and fluid-filled systems and offers a fast and efficient method of connection and removal of Danfoss products

Type	Code No	Pack Size	Weight [kg]	Ext. connection	Width across flats [mm]	Max. working pressure [bar]	Max. burst pressure [bar]	Operating temp. [°C]
MBV 2000	061B6001	60	0.11	G 1/4 A DIN3852E	24 mm	600,0 bar	1500 bar	-20 - 200 °C
MBV 2000	061B6002	60	0.11	G 1/2 A DIN3852E	30 mm	600,0 bar	1500 bar	-20 - 200 °C
MBV 2000	061B6003	60	0.12	G 1/2 A DIN3852E	30 mm	600,0 bar	1500 bar	-20 - 200 °C

MBV 5000 test valves - for MBS and MBC



The MBV 5000 is a part of a block concept covering block pressure switches, block pressure transmitters, block test valves and accessories.

The block concept has been developed to save space, weight, and costs and meet the strict demands on marine equipment, including EU stipulations on such products.

MBV 5000 is designed in many different configurations for use in many different marine applications, for example: Monitoring, alarm indication, shut-down, diagnosing on equipment such as motors, gears, thrusters, pumps, filters, compressors, etc.

The block valve meets demands for fast installation, simple isolation, and easy test pressure connection.

- The MBV block valves designed in many configurations are for use with the MBC pressure switch or the MBS block pressure transmitter within the marine industry
- The valve meets demands for fast installation, simple isolation and easy test pressure connection

Type	Code No	Pack Size	Weight [kg]	Inputs	Outputs	Ball valves	Pressure conn.	Test pressure conn.	Test function
MBV 5000	061B7000	15	0.43	1	1	1	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7001	18	0.87	2	2	2	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7002	12	1.32	3	3	3	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7005	18	0.86	1	2	2	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7006	12	1.31	1	3	3	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7009	18	0.79	1	2	1	G 1/4 DIN3852-E	M16 x 2	Common
MBV 5000	061B7010	12	1.12	1	3	1	G 1/4 DIN3852-E	M16 x 2	Common




Miscellaneous accessories & spare parts - for MBV

Type	Code No	Pack Size	Weight [kg]	Conn. size	Conn. std.	Conn. type	Application
Adaptor	061B720601	70	0.11	G 1/4	ISO 228-1	Pipe thread	MBV 5000
Adaptor	061B720201	70	0.11	G 1/8	ISO 228-1	Pipe thread	MBV 5000

Miscellaneous accessories & spare parts - for pressure transmitters

Type	Code No	Pack Size	Weight [kg]	El. conn.	Conn. std.
PLUG	060G1034	8	0.39	Plug with 5 meter cable (EN 145301-803)	DIN 43650-A
PLUG	060G0007	8	0.03	Pg 11 plug (EN 145301-803)	-
PLUG	060G0005	8	0.06	Pg 13.5 plug (EN 145301-803)	DIN 43650
PLUG	060G0008	8	0.03	Pg 9 plug (EN 145301-803)	-

Temperature switches

Type	RT	KPS	KP
Pages	30	30	31
			
Temperature range	-5 - 300 °C	-10 - 200 °C	0 - 150 °C
Sensor type	Room sensor or Remote sensor with capillary tube	Remote sensor with armoured tube, Rigid sensor or Remote sensor with capillary tube	Room sensor or Remote sensor with capillary tube
Capillary tube length	2000 - 5000 mm	2000 - 5000 mm	2000 mm
Enclosure	IP 66 / 54	IP 67	IP 30
Max. sensor temperature	75 - 350 °C	80 - 300 °C	80 - 200 °C

Temperature Monitoring & Control

Temperature switches

The range of temperature switches includes components for general industrial use as well as specialised switches for demanding applications.

RT Temperature switches



RT controls are used in general industrial and marine sectors. The RT temperature switch series consist of a variety of ordinary room temperature switches and remote sensor temperature switches including neutral zone temperature switches. RT temperature switches are generally recommended for applications where safety or economical consequences are critical factors. RT controls have been in service for more than 60 years.

- Temperature ranges: -60°C to 300°C
- Replaceable contact system
- Also available with gold plated contact systems
- Fail-safe
- Adjustable differential
- Enclosure IP66
- Available with min. and max. reset function (IP54)
- Available with dead zone
- Available with all relevant marine approvals

Type	Code No	Pack Size	Weight [kg]	Temp. range [°C]	Diff. min. range setting [°C]	Diff. max. range setting [°C]	Max. sensor temp. [°C]	Encl.	Sensor type	Capillary tube length [mm]	Contact function	Reset	Sensor size (Ø x L) [mm]
RT4	017-503666	15	0.92	-5 - 30 °C	1.5 - 7 °C	1.2 - 4.0 °C	75 °C	IP66	Room Sensor	-	SPDT	-	-
RT103	017-515566	15	0.92	10 - 45 °C	1.3 - 7 °C	1.0 - 5.0 °C	100 °C	IP66	Room Sensor	-	SPDT	-	-
RT106	017-504866	15	1.10	20 - 90 °C	4 - 20 °C	2.0 - 7.0 °C	120 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	13 x 80 mm
RT101	017-500366	15	0.94	25 - 90 °C	2.4 - 10 °C	3.5 - 20.0 °C	300 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	9.5 x 80 mm
RT101	017-500466	15	0.96	25 - 90 °C	2.4 - 10 °C	3.5 - 20.0 °C	300 °C	IP54	Remote Sensor w/cap. tube	2.000 mm	SPDT	Max	9.5 x 80 mm
RT101	017-500666	15	0.99	25 - 90 °C	2.4 - 10 °C	3.5 - 20.0 °C	300 °C	IP66	Remote Sensor w/cap. tube	3.000 mm	SPDT	-	9.5 x 80 mm
RT101	017-502266	15	1.11	25 - 90 °C	2.4 - 10 °C	3.5 - 20.0 °C	300 °C	IP66	Remote Sensor w/cap. tube	5.000 mm	SPDT	-	9.5 x 110 mm
RT108	017-506066	12	1.22	30 - 140 °C	5 - 20 °C	4.0 - 14.0 °C	220 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	9.5 x 410 mm
RT107	017-513566	15	0.95	70 - 150 °C	6 - 25 °C	1.8 - 8.0 °C	215 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	9.5 x 110 mm
RT107	017-513666	15	0.93	70 - 150 °C	6 - 25 °C	1.8 - 8.0 °C	215 °C	IP54	Remote Sensor w/cap. tube	2.000 mm	SPDT	Max	9.5 x 110 mm
RT107	017-513966	15	0.99	70 - 150 °C	6 - 25 °C	1.8 - 8.0 °C	215 °C	IP66	Remote Sensor w/cap. tube	3.000 mm	SPDT	-	9.5 x 110 mm
RT107	017-514066	15	1.10	70 - 150 °C	6 - 25 °C	1.8 - 8.0 °C	215 °C	IP66	Remote Sensor w/cap. tube	5.000 mm	SPDT	-	9.5 x 110 mm
RT107	017-514166	15	1.10	70 - 150 °C	6 - 25 °C	1.8 - 8.0 °C	215 °C	IP54	Remote Sensor w/cap. tube	5.000 mm	SPDT	Max	9.5 x 110 mm
RT120	017-520866	15	0.98	120 - 215 °C	7 - 30 °C	1.8 - 9.0 °C	260 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	9.5 x 80 mm
RT120	017-521466	15	0.98	120 - 215 °C	7 - 30 °C	1.8 - 9.0 °C	260 °C	IP54	Remote Sensor w/cap. tube	2.000 mm	SPDT	Max	9.5 x 80 mm
RT123	017-522066	15	0.94	150 - 250 °C	6.5 - 30 °C	1.8 - 9.0 °C	300 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	9.5 x 110 mm
RT123	017-522466	15	0.95	150 - 250 °C	6.5 - 30 °C	1.8 - 9.0 °C	300 °C	IP54	Remote Sensor w/cap. tube	2.000 mm	SPDT	Max	9.5 x 110 mm
RT124	017-522766	15	0.95	200 - 300 °C	5 - 25 °C	2.5 - 10.0 °C	350 °C	IP66	Remote Sensor w/cap. tube	2.000 mm	SPDT	-	11 x 110 mm
RT124	017-523166	15	0.95	200 - 300 °C	5 - 25 °C	2.5 - 10.0 °C	350 °C	IP54	Remote Sensor w/cap. tube	2.000 mm	SPDT	Max	11 x 110 mm

KPS Temperature switches



In the KPS thermostats series, special attention has been given to meeting important demands for a high level of enclosure, a robust, compact construction and resistance to shock and vibration. The KPS range covers most outdoor as well as indoor application requirements, and are suitable for use in monitoring, alarm and regulation systems in factories, diesel plant, compressors, powerstation and on board ships.

- Temperature ranges: -10 to +200 deg C
- Gold plated contact systems
- Adjustable or fixed differential
- Robust and compact construction
- Resistance to shock and vibrations
- Enclosure IP67. Sturdy and sea water resistant.
- Available with all relevant land and marine approvals

Type	Code No	Pack Size	Weight [kg]	Temp. range [°C]	Max. sensor temp. [°C]	Sensor type	Capillary tube length [mm]	Contact function	Ambient temp. [°C]	Sensor size (Ø x L) [mm]
KPS76	060L311266	10	1.26	-10 - 30 °C	80 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS77	060L310066	10	0.94	20 - 60 °C	130 °C	Rigid Sensor	-	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS77	060L310166	10	1.23	20 - 60 °C	130 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS77	060L310266	10	1.11	20 - 60 °C	130 °C	Remote Sensor w/cap. tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS77	060L311866	8	0.90	20 - 60 °C	130 °C	Rigid Sensor	-	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS79	060L310366	10	0.91	50 - 100 °C	200 °C	Rigid Sensor	-	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS79	060L310466	10	1.22	50 - 100 °C	200 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS79	060L310566	10	1.13	50 - 100 °C	200 °C	Remote Sensor w/cap. tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS79	060L312166	8	0.88	50 - 100 °C	200 °C	Rigid Sensor	-	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS81	060L310666	10	1.23	60 - 150 °C	250 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS80	060L312666	8	0.89	70 - 120 °C	220 °C	Rigid Sensor	-	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS80	060L312866	10	1.21	70 - 120 °C	220 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS80	060L312966	10	1.10	70 - 120 °C	220 °C	Remote Sensor w/cap. tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS80	060L313066	10	1.56	70 - 120 °C	220 °C	Remote Sensor w.armoured tube	5.000 mm	SPDT gold	-40 - 70 °C	13 x 90 mm
KPS80	060L315666	10	1.35	70 - 120 °C	220 °C	Remote Sensor w.armoured tube	3.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm
KPS83	060L310866	10	1.24	100 - 200 °C	300 °C	Remote Sensor w.armoured tube	2.000 mm	SPDT gold	-40 - 70 °C	13 x 63 mm

KP Temperature switches



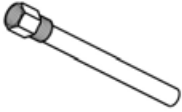
Danfoss KP thermostats are used for regulating, monitoring and alarm systems in industry. The KP series are temperature-operated electric circuit breakers. The thermostats are fitted with a single-pole switch (SPDT), and can control single-phase ac motors of up to 2 kW directly.

- Temperature ranges: 0° C to 150° C
- High contact load - Ultra short bounce-time
- Also available with gold plated contact systems
- Enclosure IP44 when mounted with top cover and back plate
- Also available with enclosure IP55 for OEM customers
- Small dimensions - space saving - easy to install
- Shock and impact resistant

Type	Code No	Pack Size	Weight [kg]	Temp. range [°C]	Max. sensor temp. [°C]	Encl.	Sensor type	Capillary tube length [mm]	Contact function	Ambient temp. [°C]	Sensor size (Ø x L) [mm]
KP75	060L117166	32	0.42	0 - 40 °C	80 °C	IP30	Room Sensor	-	SPDT gold	-40 - 65 °C	25 x 78 mm
KP76	060L120066	32	0.51	5 - 45 °C	120 °C	IP30	Room Sensor	-	SPDT	-40 - 65 °C	40 x 30 mm
KP78	060L118466	32	0.43	30 - 90 °C	150 °C	IP30	Remote Sensor w/cap. tube	2.000 mm	SPDT	-40 - 65 °C	9.5 x 85 mm
KP79	060L112666	14	0.44	50 - 100 °C	150 °C	IP30	Remote Sensor w/cap. tube	2.000 mm	SPDT	-40 - 65 °C	9.5 x 85 mm
KP81	060L112566	14	0.44	80 - 150 °C	200 °C	IP30	Remote Sensor w/cap. tube	2.000 mm	SPDT	-40 - 65 °C	9.5 x 85 mm

Accessories & spare parts - temperature switches

Sensor pockets - for temperature switches



Type	Code No	Pack Size	Weight [kg]	Conn. size	Conn. std.	Conn. type	Sens. pocket min. [mm]	Prot. tube mat.	Application
Sensor pocket	060L326466	10	0.08	1/2-14 NPT	ANSI/ASME B1.20.1	Pipe thread	75 mm	Brass	CAS / KPS
Sensor pocket	060L326566	10	0.07	1/2-14 NPT	ANSI/ASME B1.20.1	Pipe thread	65 mm	Brass	CAS / KPS
Sensor pocket	060L333366	10	0.10	1/2-14 NPT	ANSI/ASME B1.20.1	Pipe thread	65 mm	Brass	-
Sensor pocket	017-437066	10	0.10	G 1/2 A	ISO 228-1	Pipe thread	112 mm	Brass	KP / RT
Sensor pocket	060L326266	10	0.07	G 1/2 A	ISO 228-1	Pipe thread	75 mm	Brass	-
Sensor pocket	060L326366	10	0.11	G 1/2 A	ISO 228-1	Pipe thread	160 mm	Brass	-
Sensor pocket	060L326766	10	0.07	G 1/2 A	ISO 228-1	Pipe thread	75 mm	Stainless steel	CAS / KPS
Sensor pocket	060L326866	10	0.8	G 1/2 A	ISO 228-1	Pipe thread	110 mm	Stainless steel	CAS / KPS
Sensor pocket	060L326966	10	0.9	G 1/2 A	ISO 228-1	Pipe thread	160 mm	Stainless steel	CAS / KPS
Sensor pocket	060L327166	10	0.8	G 1/2 A	ISO 228-1	Pipe thread	110 mm	Brass	CAS / KPS
Sensor pocket	060L332666	10	0.10	G 1/2 A	ISO 228-1	Pipe thread	75 mm	Brass	-
Sensor pocket	060L332866	10	0.10	G 1/2 A	ISO 228-1	Pipe thread	75 mm	Stainless steel	-
Sensor pocket	060L332966	10	0.12	G 1/2 A	ISO 228-1	Pipe thread	160 mm	Stainless steel	-
Sensor pocket	060L333066	10	0.11	G 1/2 A	ISO 228-1	Pipe thread	110 mm	Brass	-
Sensor pocket	060L333166	10	0.11	G 1/2 A	ISO 228-1	Pipe thread	110 mm	Stainless steel	-

Covers - for temperature switches



Type	Code No	Pack Size	Weight [kg]	Application
IP55 enclosure	060-062866	30	0.20	KP single

Miscellaneous accessories & spare parts - for temperature switches

Type	Code No	Pack Size	Weight [kg]	Application
Capillary tube gland	003N0155	50	0.11	AVTA/B
Capillary tube gland	017-422066	5	0.05	KP / RT
Protective cap	017-436066	20	0.01	RT

Temperature sensors

	MBT 3260	MBT 5250	MBT 5252	MBT 3560
	34	34	34	35
				
Temperature range	-50 - 120 °C	-50 - 200 °C	-50 - 200 °C	0 - 200 °C
Resistance value	1 x Pt 100	1 x Pt 100 or 1 x Pt1000	1 x Pt 100	1 x Pt 1000
Insertion/Extension length	Ins. 50 - 250 mm	Ins. 50 - 200 mm	Ext. 50 mm	Ext. 33 mm
Electrical connection	DIN 43650, plug Pg 9 (IP65)	DIN 43650/Pg 9 -13.5	Type B / Pg 16	DIN 43650, plug Pg 9
Process connection size	G 1/2 A	G 1/2 A, G 3/4 A or 1/2-14 NPT	G 1/2 A	G 1/4 A

Temperature sensors

The Danfoss range of temperature sensors is based on decades of global experience within the marine industry and in refrigeration plants - undoubtedly some of the toughest environments around.

Even in these demanding surroundings you can trust our products; they have a long life thanks to their robust design.



MBT 3260 Temperature sensors with fixed insert



The MBT 3260 is a light duty temperature sensor that can be used for measuring and regulation in piping and ventilation systems and other light industrial applications. Due to the fact that the protection tube is made of copper the MBT 3260 has a very short response time of down to $t_{0,5} = 2$ sec. in water. This temperature sensor is based on a standardized Pt100 or Pt1000 element, which gives a reliable and accurate measurement.

Parts in contact with the media are made of copper or brass. The MBT 3260 is delivered with a DIN 43650 plug as standard.

- Pt100 or Pt1000 resistance element
- Temperature range -50 to 120° C
- Copper tube
- Short response times
- G $\frac{1}{2}$ A brass process connection
- Gold plated connectors
- Fixed measuring insert
- Multiple insertion lengths: 50, 100 or 250 mm

Type	Code No	Pack Size	Weight [kg]	Resistance value	Temp. range [°C]	Ins. length [mm]	Insert	Output sign.	Process conn. size	El. conn.	Wires [pcs]
MBT 3260	084Z6055	20	0.12	1 x Pt 100	-50 - 120 °C	50 mm	Fixed	Ohm	G $\frac{1}{2}$ A	DIN 43650, plug PG 9 (IP65)	2 pc
MBT 3260	084Z8181	20	0.13	1 x Pt 100	-50 - 120 °C	100 mm	Fixed	Ohm	G $\frac{1}{2}$ A	DIN 43650, plug PG 9 (IP65)	2 pc
MBT 3260	084Z8183	21	0.15	1 x Pt 100	-50 - 120 °C	250 mm	Fixed	Ohm	G $\frac{1}{2}$ A	DIN 43650, plug PG 9 (IP65)	2 pc

MBT 5250 Temperature sensors



The MBT 5250 is a heavy-duty temperature sensor that can be used for controlling cooling water, lubrication oil, hydraulic oil and refrigeration plants within general industry and marine applications. This temperature sensor is based on a standardized Pt100 or Pt1000 element, which gives a reliable and accurate measurement. It can be delivered with NTC/PTC elements on request. The measuring insert is based on a silicone cable, which makes the sensor very resistant towards vibrations. All parts in contact with the media are made of stainless steel AISI 316 Ti. The MBT 5250 is equipped with a DIN 43650 plug as standard, but can be delivered with M12 or DIN 72585 Bayonet on request.

- For gaseous or liquid media, e.g. air, gas, vapour, water or oil
- Up to +200°C media temperatures
- Pt100 or Pt1000 resistance element
- Can be used with 2- or 3-wire connections
- Gold plated male and female connector
- Interchangeable measuring insert
- Available with all relevant marine approvals

Type	Code No	Pack Size	Weight [kg]	Resistance value	Temp. range [°C]	Ins. length [mm]	Output sign.	Process conn. size	El. conn.	Wires [pcs]
MBT 5250	084Z8011	20	0.14	1 x Pt 100	-50 - 200 °C	50 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 9	2 pc
MBT 5250	084Z8036	20	0.14	1 x Pt 100	-50 - 200 °C	50 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8066	20	0.14	1 x Pt 100	-50 - 200 °C	50 mm	Ohm	1/2-14 NPT	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8083	14	0.14	1 x Pt 1000	-50 - 200 °C	50 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8146	20	0.19	1 x Pt 100	-50 - 200 °C	60 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 13.5	2 pc
MBT 5250	084Z8220	12	0.25	1 x Pt 100	-50 - 200 °C	60 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 13.5	2 pc
MBT 5250	084Z8019	20	0.15	1 x Pt 100	-50 - 200 °C	80 mm	Ohm	1/2-14 NPT	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8056	10	0.19	1 x Pt 100	-50 - 200 °C	80 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 13.5	2 pc
MBT 5250	084Z8006	12	0.19	1 x Pt 100	-50 - 200 °C	100 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8012	20	0.16	1 x Pt 100	-50 - 200 °C	100 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 9	2 pc
MBT 5250	084Z8039	20	0.15	1 x Pt 100	-50 - 200 °C	100 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8134	12	0.16	1 x Pt 100	-50 - 200 °C	100 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 13.5	2 pc
MBT 5250	084Z8008	12	0.17	1 x Pt 100	-50 - 200 °C	150 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8010	12	0.16	1 x Pt 100	-50 - 200 °C	150 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 9	2 pc
MBT 5250	084Z8014	15	0.21	1 x Pt 100	-50 - 200 °C	150 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 13.5	2 pc
MBT 5250	084Z8022	12	0.18	1 x Pt 100	-50 - 200 °C	200 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 9	2 pc
MBT 5250	084Z8042	12	0.25	1 x Pt 100	-50 - 200 °C	200 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 9	2 pc
MBT 5250	084Z8043	20	0.17	1 x Pt 100	-50 - 200 °C	200 mm	Ohm	G $\frac{1}{2}$ A	DIN 43650/Pg 11	2 pc
MBT 5250	084Z8218	13	0.22	1 x Pt 100	-50 - 200 °C	200 mm	Ohm	G $\frac{3}{4}$ A	DIN 43650/Pg 13.5	2 pc

MBT 5252 Temperature sensors



The MBT 5252 is a heavy-duty temperature sensor that can be used for controlling cooling water, lubrication oil, hydraulic oil and refrigeration plants within general industry and marine applications.

This temperature sensor is based on a standardized Pt100 or Pt1000 element, which gives a reliable and accurate measurement. The MBT 5252 can be delivered with NTC/PTC elements on request. If needed, a transmitter (MBT 9110) can be ordered as an integrated part of the sensor. In the low temperature version (-50 °C to +200 °C) the measuring insert is based on a silicone cable, which makes the sensor very resistant towards vibrations. All parts in contact with the media are made of stainless steel AISI 316 Ti. The MBT 5252 is equipped with a B-head as standard, but can be delivered with B-mini or B-head with screw cap on request.

- For gaseous or liquid media, e.g. air, gas, vapour, water or oil
- Up to +400° C media temperatures
- Available with built-in transmitter
- Available with all relevant marine approvals

Type	Code No	Pack Size	Weight [kg]	Transmitter setting range [°C]	Insert	Resistance value	Temp. range [°C]	Ext. length [mm]	Output sign. [mA]	Output sign.	Process conn. size	El. conn.	Wires [pcs]
MBT 5252	084Z8210	10	0.37	-	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	-	Ohm	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc
MBT 5252	084Z8211	10	0.39	-	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	-	Ohm	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc
MBT 5252	084Z8214	10	0.37	0 - 100 °C	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	4 - 20 mA	-	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc
MBT 5252	084Z8215	10	0.41	0 - 100 °C	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	4 - 20 mA	-	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc
MBT 5252	084Z8216	10	0.41	0 - 100 °C	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	4 - 20 mA	-	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc
MBT 5252	084Z8217	8	0.43	0 - 100 °C	Exchangeable	1 x Pt 100	-50 - 200 °C	50 mm	4 - 20 mA	-	G $\frac{1}{2}$ A	Type B / Pg 16	2 pc

MBT 3560 Temperature sensors with built-in transmitter



With MBT 3560 we have combined the technology of our standard temperature sensors and the electrical connections from the MBS pressure transmitters with a new developed electronics which has resulted in a compact temperature sensor with a built-in transmitter. The MBT 3560 is designed for use in harsh industrial environments where reliable, robust and accurate equipment is required. Available with a wide selection of process and electrical connections. Can be delivered with a 33 mm extension length which makes it possible to measure temperatures up to 200°C without damaging the built-in electronics.

- Ultra compact design
- Acid-resistant stainless steel enclosure (AISI 316L)
- Temperature range -50 °C - +200°C
- Pt 1000 resistance element
- Output signals: 4 - 20 mA or Ratiometric
- Protection tube: ø 8 mm
- Multiple insertion lengths: 50 mm - 250 mm

Type	Code No	Pack Size	Weight [kg]	Transmitter setting range [°C]	Ins. length [mm]	Insert	Ext. length [mm]	Output sig. [mA]	Process conn. size	El. conn.
MBT 3560	084Z4032	13	0.17	0 - 100 °C	150 mm	Fixed	-	4 - 20 mA	G 1/4 A	DIN 43650/Pg 9
MBT 3560	084Z4034	8	0.22	0 - 100 °C	250 mm	Fixed	-	4 - 20 mA	G 1/4 A	DIN 43650/Pg 9
MBT 3560	084Z4037	20	0.18	0 - 200 °C	150 mm	Fixed	33 mm	4 - 20 mA	G 1/4 A	DIN 43650/Pg 9
MBT 3560	084Z4039	8	0.20	0 - 200 °C	250 mm	Fixed	33 mm	4 - 20 mA	G 1/4 A	DIN 43650/Pg 9

Accessories & spare parts - temperature sensors

Plug-in displays - for temperature sensors



Type	Code No	Pack Size	Weight [kg]	Description	Electrical connection [kg]
MBD 1000	060G2850	23	0.11	Plug-in display unit MBD	EN 175301-803

Contactors & Motor Starters

Contactors

The contactor range includes minicontactors from 2.2. to 4 kW and control relays/ contactors from 2.2 to 238 kW. The range of auxiliary functions and accessories is very comprehensive and includes: auxiliary contact blocks, timer blocks, interface modules, suppression blocks, mechanical interlocks, rating plates and many more.



CI 4 Mini contactors



The mini contactor is a small, compact unit, typically with 3 NO main contacts and a built-in normally open (NO) or normally closed (NC) auxiliary contact. Operation, overload protection and phase failure protection of induction motors are typical applications for the mini contactor, combined with a thermal overload relay.

- Compact design
- Screw or DIN rail mounting
- Power range 1.5 to 5.9 kW
- Basic module with one built-in aux. contact (NO or NC)
- For ac and dc coil voltages
- Low-power dc coils suitable for p. and PLC control

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power 380-500 V	AC-3 le	AC-1 lth open	AC-1 lthe incl.	Built-in aux. NC contacts	Built-in aux. NO contacts	Coil voltage 50 Hz	Coil voltage 60 Hz	Coil voltage dc
CI 4-2	037H321013	20	0.16	1.1 kW	1.5 kW	3.7 A	16.0 A	12.0 A	-	4	24 V	24 V	-
CI 4-2	037H321032	20	0.16	1.1 kW	1.5 kW	3.7 A	16.0 A	12.0 A	-	4	220 - 230 V	230 - 240 V	-
CI 4-2	037H321113	10	0.16	1.1 kW	1.5 kW	3.7 A	16.0 A	12.0 A	2	2	24 V	24 V	-
CI 4-2	037H321132	20	0.16	1.1 kW	1.5 kW	3.7 A	16.0 A	12.0 A	2	2	220 - 230 V	230 - 240 V	-
CI 4-5	037H311413	20	0.17	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	-	1	24 V	24 V	-
CI 4-5	037H311432	20	0.16	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	-	1	220 - 230 V	230 - 240 V	-
CI 4-5	037H311513	20	0.16	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	1	-	24 V	24 V	-
CI 4-5	037H311532	20	0.16	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	1	-	220 - 230 V	230 - 240 V	-
CI 4-5	037H314302	20	0.21	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	-	1	-	-	24 V
CI 4-5	037H314402	20	0.21	1.5 kW	2.2 kW	5.3 A	20.0 A	16.0 A	1	-	-	-	24 V
CI 4-9	037H311613	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	1	24 V	24 V	-
CI 4-9	037H311623	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	1	110 V	110 - 120 V	-
CI 4-9	037H311632	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	1	220 - 230 V	230 - 240 V	-
CI 4-9	037H311633	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	1	240 V	240 V	-
CI 4-9	037H311713	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	1	-	24 V	24 V	-
CI 4-9	037H311723	70	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	1	-	110 V	110 - 120 V	-
CI 4-9	037H311732	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	1	-	220 - 230 V	230 - 240 V	-
CI 4-9	037H311813	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	-	24 V	24 V	-
CI 4-9	037H311832	20	0.16	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	-	220 - 230 V	230 - 240 V	-
CI 4-9	037H314502	20	0.21	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	-	1	-	-	24 V
CI 4-9	037H314602	20	0.20	3.0 kW	4.0 kW	9.0 A	20.0 A	16.0 A	1	-	-	-	24 V
CI 4-12	037H345713	10	0.17	3.3 kW	5.9 kW	12.0 A	20.0 A	16.0 A	-	1	24 V	24 V	-
CI 4-12	037H345732	20	0.16	3.3 kW	5.9 kW	12.0 A	20.0 A	16.0 A	-	1	220 - 230 V	230 - 240 V	-
CI 4-12	037H345813	20	0.17	3.3 kW	5.9 kW	12.0 A	20.0 A	16.0 A	1	-	24 V	24 V	-
CI 4-12	037H345832	20	0.16	3.3 kW	5.9 kW	12.0 A	20.0 A	16.0 A	1	-	220 - 230 V	230 - 240 V	-
CI 4-12	037H346002	10	0.20	4.0 kW	5.9 kW	12.0 A	20.0 A	16.0 A	1	-	-	-	24 V

CI (6-50 series) Contactors



The contactor programme CI 6-50 is based on three frame sizes. The smallest frame size consists of CI 6-15 (2.2-7.5 kW), the middle contains the CI 16-30 range (7.5-15 kW) and the largest frame size is represented by the CI 32-50 (15-25 kW). All frame sizes are provided with three NO main contacts. CI 6-15 are available with four NO main contacts.

- Compact design in three frame sizes
- Screw or DIN rail mounting
- Power range 2.2 to 25 kW
- For ac/dc coil voltages

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power AC-3 380-690 V	AC-3 le	AC-1 lth open	AC-1 lthe incl.	Main cont.	Coil voltage 50 Hz	Coil voltage 60 Hz	Coil voltage dc
CI 6	037H001531	30	0.30	1.5 kW	2.2 kW	6.0 A	20.0 A	16.0 A	3	220 - 240 V	-	-
CI 6	037H001831	30	0.31	1.5 kW	2.2 kW	6.0 A	20.0 A	16.0 A	4	220 - 240 V	-	-
CI 9	037H002113	30	0.29	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	24 V	24 V	-
CI 9	037H002116	30	0.28	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	24 V	29 V	-
CI 9	037H002131	30	0.30	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	220 - 240 V	-	-
CI 9	037H002132	30	0.30	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	220 - 230 V	220 V	-
CI 9	037H002137	30	0.29	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	380 - 400 V	440 V	-
CI 9	037H002231	30	0.31	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	4	220 - 240 V	-	-
CI 9DC 24	037H807166	24	0.33	2.2 kW	4.0 kW	9.0 A	25.0 A	16.0 A	3	-	-	24 V
CI 12	037H003116	30	0.28	3.0 kW	5.5 kW	12.0 A	25.0 A	20.0 A	3	24 V	29 V	-
CI 12	037H003131	30	0.29	3.0 kW	5.5 kW	12.0 A	25.0 A	20.0 A	3	220 - 240 V	-	-
CI 12	037H003132	30	0.30	3.0 kW	5.5 kW	12.0 A	25.0 A	20.0 A	3	220 - 230 V	220 V	-
CI 12	037H003137	30	0.29	3.0 kW	5.5 kW	12.0 A	25.0 A	20.0 A	3	380 - 400 V	440 V	-
CI 12	037H003231	30	0.31	3.0 kW	5.5 kW	12.0 A	25.0 A	20.0 A	4	220 - 240 V	-	-
CI 15	037H004931	30	0.29	4.0 kW	7.5 kW	16.0 A	25.0 A	20.0 A	3	220 - 240 V	-	-
CI 15	037H005031	30	0.31	4.0 kW	7.5 kW	16.0 A	25.0 A	20.0 A	4	220 - 240 V	-	-

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power AC-3 380-690 V	AC-3 le	AC-1 lth open	AC-1 lthe encl.	Main cont.	Coil voltage 50 Hz	Coil voltage 60 Hz	Coil voltage dc
CI 15DC 24	037H807366	24	0.32	4.0 kW	7.5 kW	16.0 A	25.0 A	20.0 A	3	-	-	24 V
CI 16	037H004116	25	0.34	4.0 kW	7.5 kW	16.0 A	40.0 A	25.0 A	3	24 V	29 V	-
CI 16	037H004131	25	0.34	4.0 kW	7.5 kW	16.0 A	40.0 A	25.0 A	3	220 - 240 V	-	-
CI 16	037H004137	25	0.34	4.0 kW	7.5 kW	16.0 A	40.0 A	25.0 A	3	380 - 400 V	440 V	-
CI 20	037H004531	25	0.34	5.5 kW	10.0 kW	20.0 A	40.0 A	25.0 A	3	220 - 240 V	-	-
CI 25	037H005116	25	0.34	5.5 kW	11.0 kW	25.0 A	40.0 A	25.0 A	3	24 V	29 V	-
CI 25	037H005131	25	0.34	5.5 kW	11.0 kW	25.0 A	40.0 A	25.0 A	3	220 - 240 V	-	-
CI 25	037H005132	25	0.34	5.5 kW	11.0 kW	25.0 A	40.0 A	25.0 A	3	220 - 230 V	220 V	-
CI 25	037H005137	25	0.33	5.5 kW	11.0 kW	25.0 A	40.0 A	25.0 A	3	380 - 400 V	440 V	-
CI 30	037H005531	25	0.35	8.5 kW	15.0 kW	32.0 A	40.0 A	30.0 A	3	220 - 240 V	-	-
CI 30	037H005532	25	0.35	8.5 kW	15.0 kW	32.0 A	40.0 A	30.0 A	3	220 - 230 V	220 V	-
CI 32	037H006131	18	0.82	8.5 kW	15.0 kW	32.0 A	63.0 A	63.0 A	3	220 - 230 V	-	-
CI 37	037H005631	18	0.83	10.0 kW	18.5 kW	37.0 A	80.0 A	63.0 A	3	220 V	-	-
CI 45	037H007131	18	0.83	11.0 kW	22.0 kW	45.0 A	80.0 A	80.0 A	3	220 V	-	-
CI 45	037H007132	18	0.81	11.0 kW	22.0 kW	45.0 A	80.0 A	80.0 A	3	220 - 230 V	220 V	-
CI 50	037H008031	18	0.82	15.0 kW	25.0 kW	52.0 A	80.0 A	80.0 A	3	220 V	-	-

CI (61-86 series) Contactors



The contactor programme CI 61-86 consists of one frame size with three NO main contacts. Coils are standard for dual frequency. A long electrical lifetime makes the CI 61-86 contactors suitable for operation of all kinds of electrical loads in modern industry. Combined with a thermal overload relay, the contactor switches and protects induction motors against overload and asymmetric load. A wide range of clip-on aux. contacts, timers, surge suppressors, mechanical interlock and marking plates makes the CI 61-86 programme very flexible and suitable both for OEMs and panel builders.

- Compact design
- Screw or DIN rail mounting
- Power range 30 kW to 45 kW
- For ac coil voltages

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power AC-3 380-690 V	AC-3 le	AC-1 lth open	AC-1 lthe encl.	Main cont.	Coil voltage 50 Hz	Coil voltage 60 Hz
CI 61	037H306113	7	1.46	18.5 kW	30.0 kW	60.0 A	100.0 A	100.0 A	3	24 V	24 V
CI 61	037H306132	7	1.48	18.5 kW	30.0 kW	60.0 A	100.0 A	100.0 A	3	220 - 230 V	220 - 230 V
CI 73	037H306213	1	1.46	22.0 kW	37.0 kW	72.0 A	100.0 A	100.0 A	3	24 V	24 V
CI 73	037H306232	7	1.48	22.0 kW	37.0 kW	72.0 A	100.0 A	100.0 A	3	220 - 230 V	220 - 230 V
CI 86	037H306313	7	1.48	25.0 kW	45.0 kW	85.0 A	100.0 A	100.0 A	3	24 V	24 V
CI 86	037H306332	1	1.48	25.0 kW	45.0 kW	85.0 A	100.0 A	100.0 A	3	220 - 230 V	220 - 230 V

CI (110-180 series) Contactors



The contactor programme CI 110-180 consists of one frame size with three NO main contacts and one auxiliary contact block with one NO and one NC auxiliary contact. Spare contacts are available and by maintenance, the moveable system blocks when removing the chamber. By replacing contacts, wire separation from terminals is not necessary. A long electrical lifetime makes the CI 110-180 contactors suitable for operation of all kinds of electrical loads in modern industry. Combined with a thermal overload relay or an electronic motor protection relay, the contactor switches and protects induction motors against overload and asymmetric load. A wide range of clip-on aux. contacts, timers, surge suppressors, mechanical interlock and marking plates makes the CI 110-180 programme very flexible and suitable both for OEMs and panel builders.

- Compact design
- Screw mounting
- Power range 55 kW to 90 kW
- Basic modules with aux. contacts (1 NO + 1 NC)
- For ac coil voltages

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power AC-3 380-1000 V	AC-3 le	AC-1 lth open	AC-1 lthe encl.	Coil voltage 50 Hz	Coil voltage 60 Hz
CI 110	037H308122	1	3.98	32.0 kW	55.0 kW	110.0 A	160.0 A	135.0 A	110 V	127 V
CI 110	037H308131	1	3.98	32.0 kW	55.0 kW	110.0 A	160.0 A	135.0 A	220 - 230 V	260 V
CI 110	037H308137	1	3.98	32.0 kW	55.0 kW	110.0 A	160.0 A	135.0 A	380 - 400 V	440 V
CI 141	037H333916	2	3.92	45.0 kW	75.0 kW	140.0 A	250.0 A	210.0 A	24 V	28 V
CI 141	037H333922	1	4.17	45.0 kW	75.0 kW	140.0 A	250.0 A	210.0 A	110 V	127 V
CI 141	037H333931	1	3.98	45.0 kW	75.0 kW	140.0 A	250.0 A	210.0 A	220 - 230 V	260 V
CI 141	037H333937	2	3.98	45.0 kW	75.0 kW	140.0 A	250.0 A	210.0 A	380 - 400 V	440 V
CI 180	037H308222	2	4.16	55.0 kW	90.0 kW	180.0 A	250.0 A	210.0 A	110 V	127 V
CI 180	037H308231	1	4.20	55.0 kW	90.0 kW	180.0 A	250.0 A	210.0 A	220 - 230 V	260 V
CI 180	037H308237	1	4.14	55.0 kW	90.0 kW	180.0 A	250.0 A	210.0 A	380 - 400 V	440 V

CI EI (210-420 series) Contactors with interface relay



The contactor programme CI 210 EI - 420 EI consist of one frame size. The series are equipped with three NO main contacts and an auxiliary contact block with one NO and one NC auxiliary contact. Spare contacts are available and by maintenance, the moveable system blocks when removing the chamber. The factory setting makes the contactors operate as standard conventional contactors, but for PLC application, the built-in interface relay can be activated. A long electrical lifetime makes the CI 210 EI - 420 EI contactors suitable for operation of all kinds of electrical loads in modern industry. A wide range of clip-on aux. contacts, timers, surge suppressors, mechanical interlock and marking plates makes the CI 210 EI - 420 EI programme very flexible and suitable both for OEMs and panel builders.

- Compact design
- Screw mounting
- Power range 110 kW to 220 kW
- Basic modules with built-in aux. contacts
- Electronic control of switching coil voltage
- Wide voltage range
- Dual frequency coil at 50-60 Hz as standard
- Integrated interface relay for PLC application

Type	Code No	Pack Size	Weight [kg]	AC-3 power 220-240 V	AC-3 power AC-3 380-1000 V	AC-3 le	AC-1 lth open	AC-1 lthe encl.	Main cont.	Coil voltage 60 Hz
CI 210 EI	037H325932	1	7.55	63.0 kW	110.0 kW	210.0 A	350.0 A	300.0 A	3	208 - 277 V
CI 250 EI	037H326732	1	7.86	80.0 kW	132.0 kW	250.0 A	350.0 A	300.0 A	3	208 - 277 V
CI 300 EI	037H326932	1	7.98	90.0 kW	160.0 kW	300.0 A	450.0 A	380.0 A	3	208 - 277 V
CI 420 EI	037H327932	1	8.10	132.0 kW	220.0 kW	420.0 A	500.0 A	425.0 A	3	208 - 277 V

Accessories & spare parts - contactors

Auxiliary contacts - for contactors



Type	Code No	Pack Size	Weight [kg]	Function	Mounting	Comments	Application
CBD-11	037H3064	10	0.04	1 NO+1 NC	Front	-	CI 61,73,86
CBM-11	037H3151	150	0.03	1 NO+1 NC	Front	-	CI 4-
CBC-11	037H3231	10	0.9	1 NO+1 NC	Right hand side	-	CI 105,141,170EI,420EI
CBD S-11	037H3069	10	0.04	1 NO+1 NC	Side	-	CI 61,73,86
CBD-22	037H3065	10	0.07	2 NO+2 NC	Front	-	CI 61,73,86
CBM-22	037H3152	150	0.04	2 NO+2 NC	Front	-	CI 4-
CB-NC	037H0112	20	0.01	Break	Front	-	CI 6-50
CB-NC	037H0122	20	0.01	Break	Front	Gold-plated contacts	CI 6-50
CB-EM	037H0113	20	0.01	Early make	Front	-	CI 6-50
CB-LB	037H0114	20	0.01	Late break	Front	-	CI 6-50
CB-NO	037H0111	20	0.01	Make	Front	-	CI 6-50
CB-NO	037H0121	20	0.01	Make	Front	Gold-plated contacts	CI 6-50
CB-S	037H0110	20	0.01	Start	Front	-	CI 6-50

Charge suppressors - for contactors



Type	Code No	Pack Size	Weight [kg]	Description	Voltage V, 50 Hz	Voltage V, 60 Hz	Application
RC 250	037H0076	10	0.02	RC element	110 - 205 V	110 - 205 V	CI 6-30

Clip-on timers - for contactors



Type	Code No	Pack Size	Weight [kg]	Function	Control voltage 50/60 Hz	Control voltage dc	Time range	Application
ETB	047H0183	100	0.03	Off-delay	110 - 240 V	-	0.5 - 20.0 s	CI 6-50
ETB	047H0184	100	0.03	Off-delay	110 - 240 V	-	4.0 - 160.0 s	CI 6-50
ETB	047H0185	100	0.03	Off-delay	110 - 240 V	-	0.5 - 20.0 min	CI 6-50
ETB	047H0180	100	0.03	Off-delay	24 - 65 V	-	0.5 - 20.0 s	CI 6-50
ETB	047H0181	100	0.03	Off-delay	24 - 65 V	-	4.0 - 160.0 s	CI 6-50
ETB	047H0190	100	0.02	On-delay	-	24 - 65 V	0.5 - 20.0 s	CI 6-50
ETB	047H0173	100	0.03	On-delay	110 - 240 V	-	0.5 - 20.0 s	CI 6-50
ETB	047H0174	100	0.03	On-delay	110 - 240 V	-	4.0 - 160.0 s	CI 6-50
ETB	047H0175	100	0.03	On-delay	110 - 240 V	-	0.5 - 20.0 min	CI 6-50
ETB	047H0170	100	0.03	On-delay	24 - 65 V	-	0.5 - 20.0 s	CI 6-50

Contactor coils - for contactors

Type	Code No	Pack Size	Weight [kg]	Voltage V, 50 Hz	Voltage V, 60 Hz	Application
Accessory	037H6087	8	0.13	110 V	110 V	CI 32-50
Accessory	037H6487	6	0.06	110 V	110 V	CI 6-30
Accessory	037H6469	6	0.05	183 V	220 V	CI 6-30
Accessory	037H6461	72	0.05	20 V	24 V	CI 6-30
Accessory	037H6072	8	0.13	220 - 230 V	-	CI 32-50
Accessory	037H6088	8	0.12	220 - 230 V	220 - 230 V	CI 32-50
Accessory	037H6488	6	0.06	220 - 230 V	220 V	CI 6-30
Accessory	037H6472	6	0.06	220 - 240 V	-	CI 6-30
Accessory	037H6084	8	0.12	24 V	24 V	CI 32-50
Accessory	037H6484	6	0.05	24 V	24 V	CI 6-30
Accessory	037H6062	8	0.13	24 V	29 V	CI 32-50
Accessory	037H6462	6	0.05	24 V	29 V	CI 6-30
Accessory	037H6078	8	0.13	380 - 400 V	440 V	CI 32-50
Accessory	037H6478	6	0.05	380 - 400 V	440 V	CI 6-30
Accessory	037H6479	6	0.05	415 V	500 V	CI 6-30
Accessory	037H6463	6	0.05	42 V	42 - 50 V	CI 6-30

Covers - for contactors



Type	Code No	Pack Size	Weight [kg]	Description	Push buttons	Application
BCI	047B010666	18	0.38	Enclosure	None	Control relay/ contactor 6-30A
BCI 2	047B010266	18	0.40	Enclosure	Start-stop/reset	Motor starter 6-30A
BCI 1	047B010466	18	0.39	Enclosure	Stop/reset	Motor starter 6-30A

Jumpers - for contactors



Type	Code No	Pack Size	Weight [kg]	Description	Application
Accessory	037H010466	75	0.24	3-pole jumper	CI 6-15

Mechanical interlocks - for contactors

Type	Code No	Pack Size	Weight [kg]	Application
Accessory	037H010666	18	0.03	CI 32-50
Accessory	037H010066	10	0.03	CI 6-30

Overload relays

The thermal overload range TI 9C, TI 16C, TI 25C, TI 30C, TI 80 & TI 86 are used with the contactor range CI 4 - CI 86 to give protection of squirrel-cage motors.

The electronic motor protection relays TI 180E and TI 630E give effective protection of electric motors exposed to thermal overload, phase failure and asymmetrical load.

TI C 9 Thermal overload relays



The thermal overload relays TI 9 C cover the range from 0.13 - 9.2 Amp. The phase failure function accelerates the trip function by three phase run if a phase drop-out occurs. This is particularly important for delta connected motors.

- For use with mini contactors CI 4
- Compact design
- Stop/reset button
- Manual/automatic reset function
- Test trip function
- Double scale for direct start or Y-Δ#8710; start
- Galvanically isolated signal contacts
- Single phase failure protection

Type	Code No	Pack Size	Weight [kg]	Current. motor starter	Current. star-delta starter
TI 9C	047H3063	10	0.12	0.40 - 0.62 A	-
TI 9C	047H3065	10	0.12	0.85 - 1.30 A	-
TI 9C	047H3066	10	0.12	1.20 - 1.90 A	-
TI 9C	047H3067	10	0.12	1.80 - 2.80 A	3.20 - 4.80 A
TI 9C	047H3068	10	0.12	2.70 - 4.20 A	4.70 - 7.30 A

TI C (16-30 series) Thermal overload relays



The thermal overload relays TI 16C-30C cover the range from 0.13-32 Amp and protect squirrel cage motors of up to 15 kW against overload.

The phase failure function accelerates the trip function by three phase run if a phase drop-out occurs. This is particularly important for delta connected motors.

- For use with contactors CI 6 - CI 30
- Compact design
- Stop/reset button
- Manual/automatic reset function
- Test trip function
- DOL scale / Y-Δ#8710; scale
- Galvanically isolated signal contacts
- Single phase failure protection

Type	Code No	Pack Size	Weight [kg]	Current. motor starter	Current. star-delta starter
TI 16C	047H0200	10	0.12	0.13 - 0.20 A	-
TI 16C	047H0201	10	0.12	0.19 - 0.29 A	-
TI 16C	047H0202	10	0.12	0.27 - 0.42 A	-
TI 16C	047H0203	10	0.12	0.40 - 0.62 A	-
TI 16C	047H0204	10	0.12	0.60 - 0.92 A	-
TI 16C	047H0205	10	0.12	0.85 - 1.30 A	-
TI 16C	047H0206	10	0.12	1.20 - 1.90 A	-
TI 16C	047H0207	10	0.12	1.80 - 2.80 A	3.20 - 4.80 A
TI 16C	047H0208	10	0.12	2.70 - 4.20 A	4.70 - 7.30 A
TI 16C	047H0209	10	0.12	4.00 - 6.20 A	6.90 - 10.70 A
TI 16C	047H0210	10	0.12	6.00 - 9.20 A	10.00 - 16.00 A
TI 16C	047H0211	10	0.12	8.00 - 12.00 A	13.00 - 20.80 A
TI 16C	047H0212	10	0.12	11.00 - 16.00 A	19.00 - 27.00 A
TI 25C	047H0213	10	0.12	15.00 - 20.00 A	26.00 - 35.00 A
TI 25C	047H0214	10	0.12	19.00 - 25.00 A	33.00 - 43.00 A
TI 30C	047H0215	10	0.12	24.00 - 32.00 A	41.00 - 55.00 A

TI (80-86 series) Thermal overload relays



The thermal overload relays TI 80-86 cover the range from 16-85 Amp and protect squirrel cage motors of up to 45 kW against overload.

- For use with contactors CI 32 to CI 86
- Compact design
- Stop/reset button
- Manual/automatic reset function
- Test trip function
- DOL scale / Y-Δ#8710; scale
- Changeover contact
- Single phase failure protection

Type	Code No	Pack Size	Weight [kg]	Current. motor starter	Current. star-delta starter
TI 80	047H1013	10	0.34	16.00 - 23.00 A	28.00 - 40.00 A
TI 80	047H1014	10	0.33	22.00 - 32.00 A	38.00 - 56.00 A
TI 80	047H1015	10	0.34	30.00 - 45.00 A	52.00 - 78.00 A
TI 80	047H1016	10	0.34	42.00 - 63.00 A	75.00 - 109.00 A
TI 80	047H1017	10	0.34	60.00 - 80.00 A	105.00 - 138.00 A
TI 86	047H1018	10	0.35	74.00 - 85.00 A	130.00 - 147.00 A

Circuit breakers

Circuit breakers for short circuit- and overload protection of motor applications, covering the current range from 0.1 to 90 A AC-3 rating. CTI 25MB breakers offer a higher short circuit breaking capacity than the CTI 25M type due to their built-on current limiter. The program is very flexible, featuring add-on accessories such as auxiliary contacts, alarm contacts, voltage-and under voltage trips, connection terminals and bus bars.



CTI 15 Circuit breakers



Circuit breakers / manual motor starters range is modular, flexible and offers a large selection of clip-on auxiliary functions and accessories: auxiliary contact blocks, shunt releases, connection terminal, bus bars and enclosures.

- Power ranges 0.09 – 7.5 Kw / 0.09 – 12.5 kW
- Short-circuit protection
- Operation switch (manual motor starter)
- Isolation switch (with locking device)
- Emergency stop switch (with undervoltage trip)
- Indication functions: (On/Off)
- A large selection of clip-on auxiliary functions and accessories are available

Type	Code No	Pack Size	Weight [kg]	Current range	Max. load, AC-3 [kW]	Trip current max.	Breaking cap. Ics 380 - 415 V
CTI 15	047B3051	21	0.27	0.25 - 0.40 A	0.09 kW	4.4 A	50 kA
CTI 15	047B3052	21	0.27	0.40 - 0.63 A	0.12 kW	6.9 A	50 kA
CTI 15	047B3053	21	0.27	0.63 - 1.00 A	0.37 kW	11.0 A	50 kA
CTI 15	047B3054	21	0.28	1.00 - 1.60 A	0.55 kW	18.0 A	50 kA
CTI 15	047B3055	21	0.27	1.60 - 2.50 A	0.75 kW	28.0 A	50 kA
CTI 15	047B3056	21	0.31	2.50 - 4.00 A	1.50 kW	44.0 A	30 kA
CTI 15	047B3057	21	0.31	4.00 - 6.30 A	2.50 kW	69.0 A	20 kA
CTI 15	047B3058	21	0.30	6.30 - 10.00 A	5.50 kW	110.0 A	8 kA
CTI 15	047B3059	21	0.31	10.00 - 16.00 A	7.50 kW	176.0 A	6 kA

CTI M Circuit breakers



The CTI product range is modular, flexible and offers a large selection of clip-on auxiliary functions and accessories: Aux. contacts, alarm contacts, voltage- and undervoltage trips.

- Compact design
- Screw or DIN rail mounting
- Motor application
- Overload protection of motors (0.02-11 kW)
- Short-circuit protection
- Standard breaking capacity
- Setting range 0.1-25A
- Operation switch (manual motor starter)
- Isolation switch (with locking device)
- Emergency switch (with undervoltage trip)
- Indications: Test and reset functions / ON or OFF
- Thermal and electromagnetic trip

Type	Code No	Pack Size	Weight [kg]	Current range	Max. load, AC-3 [kW]	Trip current max.	Breaking cap. Ics 380 - 415 V
CTI 25M	047B3142	20	0.29	0,25 - 0,40 A	0,09 kW	5,2 A	100 kA
CTI 25M	047B3143	21	0.29	0,40 - 0,63 A	0,18 kW	8,2 A	100 kA
CTI 25M	047B3144	21	0.33	0,63 - 1,00 A	0,25 kW	13,0 A	100 kA
CTI 25M	047B3145	21	0.33	1,00 - 1,60 A	0,55 kW	21,0 A	100 kA
CTI 25M	047B3146	21	0.34	1,60 - 2,50 A	0,75 kW	33,0 A	100 kA
CTI 25M	047B3147	21	0.34	2,50 - 4,00 A	1,50 kW	52,0 A	100 kA
CTI 25M	047B3148	21	0.33	4,00 - 6,30 A	2,20 kW	82,0 A	100 kA
CTI 25M	047B3149	21	0.33	6,30 - 10,00 A	4,00 kW	130,0 A	100 kA
CTI 25M	047B3150	21	0.34	10,00 - 16,00 A	7,50 kW	208,0 A	50 kA
CTI 25M	047B3151	21	0.34	14,50 - 20,00 A	10,00 kW	260,0 A	15 kA
CTI 25M	047B3152	21	0.34	18,00 - 25,00 A	11,00 kW	325,0 A	15 kA

CTI MB Circuit breakers with built-in current limiter



The CTI product range is modular, flexible and offers a large selection of clip-on auxiliary functions and accessories: Aux. contacts, alarm contacts, voltage- and undervoltage trips.

- Compact design
- Screw or DIN rail mounting
- Motor application
- Overload protection of motors (4-22 kW)
- Short-circuit protection
- High breaking capacity
- Setting range 1.6-45A
- Operation switch (manual motor starter)
- Isolation switch (with locking device)
- Emergency switch (with undervoltage trip)
- Indications: Test and reset functions / ON or OFF
- Thermal and electromagnetic trip

Type	Code No	Pack Size	Weight [kg]	Current range	Max. load, AC-3 [kW]	Trip current max.	Breaking cap. Ics 380 - 415 V
CTI 45MB	047B3164	10	0.83	23.00 - 32.00 A	15.00 kW	416.0 A	50 kA
CTI 45MB	047B3165	10	0.83	32.00 - 45.00 A	22.00 kW	585.0 A	50 kA

CTI 100 Circuit breakers with built-in current limiter



The CTI product range is modular, flexible and offers a large selection of clip-on auxiliary functions and accessories: Aux. contacts, alarm contacts, voltage- and undervoltage trips.

- Compact design
- DIN rail mounting
- Motor application
- Short-circuit protection
- Overload protection of motors (31.5 - 45 kW)
- Setting range: 40 - 90A
- Operation switch (manual motor starter)
- Isolation switch (with locking device)
- Emergency switch (with undervoltage trip)
- Indications: Test and reset functions / ON or OFF
- Thermal and electromagnetic trip

Type	Code No	Pack Size	Weight [kg]	Current range	Max. load, AC-3 [kW]	Trip current max.	Breaking cap. Ics 380 - 415 V
CTI 100	047B3014	6	2.03	40.00 - 63.00 A	31.50 kW	882.0 A	50 kA
CTI 100	047B3015	6	2.00	63.00 - 90.00 A	45.00 kW	1.260.0 A	25 kA

Accessories & spare parts - circuit breakers

Auxiliary contacts - for circuit breakers



Type	Code No	Pack Size	Weight [kg]	Function	Mounting	Aux. contacts	Application
CBA-11	047B3200	10	0.02	1 make+1 break	Front, max 1 pr circuit breaker	1 NO+1 NC (13-14, 21-22)	CTI 25M-MB, CTI 45MB
CBI 11	047B3049	39	0.05	1 make+1 break	Lefthand	1 NO+1 NC (13-14, 21-22)	CTI 25
CBA S-11	047B3203	70	0.05	1 make+1 break	Side, max 1 pr circuit breaker	1 NO+1 NC (33-34, 41-42)	CTI 25M-MB, CTI 45MB
CBI-NC	047B3042	150	0.01	Break	Building in	1 NC (11-12)	CTI 25
CBI-NO	047B3040	150	0.01	Make	Building in	1 NO (13-14)	CTI 25
CBA-10	047B3198	10	0.01	Make	Front, max 1 pr circuit breaker	1 NO (13-14)	CTI 25M-MB, CTI 45MB

Covers - for circuit breakers



Type	Code No	Pack Size	Weight [kg]	Application	IP
BXI	047B3091	40	0.29	Circuit breaker CTI 25	IP41/55
BMG	047B3284	1	0.39	CTI 25M-MB	IP65
BMY	047B3285	20	0.36	CTI 25M-MB	IP65

Trips - for circuit breakers



Type	Code No	Pack Size	Weight [kg]	Description	Control voltage 50 Hz	Control voltage 60 Hz	Coil conn.	Application
CBI-UA	047B3061	32	0.11	Under voltage trip	220 - 230 V	254 V	D1-D2	CTI 25

Electronic timers

The electronic timers with their robust design and many built-in functions are ideal for OEMs and panel builders. Easy time setting, electrical noise immunity, mechanical shock and vibration resistance, compact standard dimensions og DIN rail or adaptor mounting



ATI Electronic on-delay timers



The electronic timers with their robust design and many built-in functions are ideal for OEMs and panel builders.

- ON delay
- Easy time setting
- Electrical noise immunity
- Mechanical shock and vibration resistance
- Time ranges: 0.1 s to 30 min
- Compact standard dimensions
- DIN rail or adaptor mounting

Type	Code No	Pack Size	Weight [kg]	Function	Control voltage	Control voltage dc	Time range
ATI	047H3092	21	0.8	On-delay	24/220-240V AC	24 V	0.1 - 10.0 s
ATI	047H3093	21	0.8	On-delay	24/220-240V AC	24 V	3.0 - 300.0 s
ATI	047H3104	21	0.8	On-delay	24/220-240V AC	24 V	0.3 - 30.0 s
ATI	047H3105	21	0.8	On-delay	24/220-240V AC	24 V	0.3 - 30.0 min

BTI Electronic off-delay timers



The electronic timers with their robust design and many built-in functions are ideal for OEMs and panel builders.

- OFF delay
- Easy time setting
- Electrical noise immunity
- Mechanical shock and vibration resistance
- Time ranges: 0.1 s to 300 s
- Compact standard dimensions
- DIN rail or adaptor mounting

Type	Code No	Pack Size	Weight [kg]	Function	Control voltage 50/60 Hz	Time range
BTI	047H3099	25	0.8	Off-delay	220 - 240 V	3.0 - 300.0 s

MTI Electronic multi-function timers



The electronic timers with their robust design and many built-in functions are ideal for OEMs and panel builders.

- Easy time setting
- Electrical noise immunity
- Mechanical shock and vibration resistance
- Time ranges: 0.05 s to 300 h
- Compact standard dimensions
- DIN rail or adaptor mounting
- Features:
 - On delay
 - Off delay
 - single pulse pause or pause pulse
 - flasher pulse pause or pause pulse
 - star-delta start

Type	Code No	Pack Size	Weight [kg]	Function	Control voltage	Control voltage 50/60 Hz	Control voltage dc	Time range
MTI	047H3076	21	0.15	Multi function	4/42-48/110-240V AC / 24/42-48V DC	-	-	0.05 s - 300 h
MTI	047H3075	25	0.16	Multi function	-	24 - 240 V	24 - 240 V	0.05 s - 300 h

SDT Electronic star-delta timers



The star-delta timer has a built-in pause of 30ms switching motor from star configuration to delta run. The electronic timers with their robust design and many built-in functions are ideal for OEMs and panel builders.

- Easy time setting
- Electrical noise immunity
- Mechanical shock and vibration resistance
- Time ranges: 0.3 s to 30 s
- Compact standard dimensions
- DIN rail or adaptor mounting

Type	Code No	Pack Size	Weight [kg]	Function	Control voltage	Control voltage 50/60 Hz	Control voltage dc	Time range
SDT	047H3111	21	0.9	Star-delta	24/220-240V AC	-	24 V	0.3 - 30.0 s
SDT	047H3112	1	0.9	Star-delta	-	380 - 415 V	-	0.3 - 30.0 s

Electronic soft starters

The MCI soft starter range are designed for soft starting and stopping of 3 phase a.c. motors, starting of 3 phase compressors (MCI C) and starting small commercial refrigeration units & heat pump (MCI-CH) thus reducing the inrush current and eliminating the damaging effects of high starting torque surges.



MCI CI-tronic™ soft starters



Covering the power range from 0.1 to 22 kW, the MCI soft starters are ideal for a wide range of start and stop applications where smooth operation is required.

Use them on pumps, compressors, fans, conveyors, gear or belt driven machinery and countless other types of equipment.

MCI is designed for unlimited number of operations per hour and is just as easy to specify and install as an ordinary contactor.

- Individual adjustable acceleration and deceleration times, up to 60 seconds
- Initial torque adjustable from 0 - 85%
- Breakaway function (Kick Start)
- Universal control voltage: 24-480V ac/dc
- Automatic detection of missing phases
- Automatic adaptation to 50/60 Hz
- LED status indicator
- Built-in varistor protection
- Unlimited start/stop operations per hour
- Optional aux. contacts
- Compact DIN rail mountable design

Type	Code No	Pack Size	Weight [kg]	Max. load [Amp]	Control voltage dc	Control voltage 50/60 Hz
MCI 3	037N0074	12	0.29	3 A	24 - 415 V	24 - 415 V
MCI 12CH	037N0095	20	0.39	12 A	-	208 - 240 V
MCI 15CH	037N0096	20	0.39	15 A	-	208 - 240 V
MCI 15	037N0037	12	0.71	15 A	24 - 240 V	24 - 240 V
MCI 15	037N0039	12	0.72	15 A	24 - 480 V	24 - 480 V
MCI 15C	037N0076	12	0.69	15 A	24 - 480 V	24 - 480 V
MCI 25CH	037N0097	20	0.43	25 A	-	208 - 240 V
MCI 25	037N0040	8	1.16	25 A	24 - 480 V	24 - 480 V
MCI 25B	037N0062	8	1.21	25 A	24 - 480 V	24 - 480 V
MCI 30 I-O	037N0070	8	1.17	30 A	24 - 480 V	24 - 480 V
MCI 50-3 I-O	037N0090	1	2.87	50 A	24 - 480 V	24 - 480 V

TCI CI-tronic™ torque limiters



TCI starting torque limiters are designed for soft starting of 1- and 3-phase AC motors.

The TCI unit is easy to install between the motor starter and the motor, and features adjustable ramp-up time and initial torque.

- Single and three-phase operation
- Adjustable ramp-up times from 0.5 - 5 seconds
- Initial torque from 0-85%
- Built-in varistor protection
- Unlimited start/stop operations per hour
- Compact DIN-rail mountable design

Type	Code No	Pack Size	Weight [kg]	Line volt. @ 50/60 Hz	Max. load [Amp]
TCI 15	037N0045	12	0.67	230 - 480 V	15 A
TCI 15CH-C	037N0111	20	0.39	380 - 415 V	15 A
TCI 25C	037N0086	12	0.70	220 - 240 V	25 A
TCI 25	037N0046	12	0.68	230 - 480 V	25 A
TCI 25CH-C	037N0112	20	0.43	380 - 415 V	25 A

Electronic motor starters

Complete electronic motor starter with integrated protection and control features. Offers better reduction of starting current than traditional star/delta starter.

MCI CL Complete electronic motor starters



Offers better reduction of starting current than a traditional star/ delta starter

- IP 65
- Main and repair switch
- Short circuit and overload protection
- Manual and remote operation of starter
- Terminal strip for connection
- Control circuit fuses
- Only 3 conductors for motor
- No zero conductor necessary
- CE approval

Type	Code No	Pack Size	Weight [kg]	Control voltage 50/60 Hz	Control voltage dc	Line volt. @ 50/60 Hz	Max. load [Amp]	Max. load, AC-3 [kW]
MCI 15CL	037N0150	1	5.32	24 - 480 V	24 - 480 V	400 V	15 A	7.50 kW
MCI 25CL	037N0151	1	6.38	24 - 480 V	24 - 480 V	400 V	25 A	11.00 kW
MCI 30CL	037N0152	1	6.84	24 - 480 V	24 - 480 V	400 V	30 A	15.00 kW
MCI 45CL	037N0153	1	9.36	24 - 480 V	24 - 480 V	400 V	45 A	22.00 kW

Code No											
003N0045	-	14	018F7352	-	12	032U1256	-	6	032U4901	-	7
003N0046	-	14	018F7353	-	12	032U1260	-	6	032U4904	-	7
003N0047	-	14	018F7358	-	12	032U1261	-	6	032U4919	-	7
003N0050	-	15	018F7360	-	12	032U1263	-	6	032U5250	-	7
003N0062	-	15	018F7361	-	12	032U1266	-	6	032U5251	-	7
003N0075	-	15	018F7363	-	12	032U145816	-	8	032U5252	-	7
003N0078	-	15	018F7365	-	12	032U145831	-	8	032U5253	-	7
003N0091	-	15	018F7396	-	12	032U146131	-	8	032U5254	-	7
003N0107	-	14	018F7397	-	12	032U147002	-	8	032U5255	-	7
003N0108	-	14	018Z0290	-	13	032U147016	-	8	032U5256	-	7
003N0109	-	14	018Z0291	-	13	032U147031	-	8	032U5257	-	7
003N0155	-	15, 32	031E020066	-	20	032U148002	-	8	032u5271	-	9
003N0192	-	15	031E020566	-	20	032U148016	-	8	032u5273	-	9
003N0196	-	15	031E021066	-	20	032U148031	-	8	032U528602	-	8
003N0388	-	15	031E021566	-	20	032U151802	-	8	032U528616	-	8
003N1144	-	14	031E022066	-	20	032U151816	-	8	032U528631	-	8
003N1162	-	14	031E022566	-	20	032U151831	-	8	032U528702	-	8
003N2132	-	14	031E023066	-	20	032U153802	-	8	032U528716	-	8
003N2162	-	14	031E023566	-	20	032U153816	-	8	032U528731	-	8
003N2182	-	14	031E024566	-	20	032U153831	-	8	032u5315	-	9
003N3132	-	14	031E025066	-	20	032U157102	-	8	032u5317	-	9
003N3162	-	14	031E025566	-	20	032U157116	-	8	032U5350	-	7
003N3182	-	14	031E029166	-	21	032U157131	-	8	032U5352	-	7
003N4132	-	14	031E029866	-	21	032U158002	-	8	032U5354	-	7
003N4150	-	14	032H8000	-	4	032U158016	-	8	032U5356	-	7
003N4162	-	14	032H8001	-	4	032U158031	-	8	032U537231	-	8
003N4182	-	14	032H8002	-	4	032U161402	-	8	032U537431	-	8
017-403066	-	22	032H8003	-	4	032U161416	-	8	032U537631	-	8
017-422066	-	15, 21, 32	032H8004	-	4	032U161431	-	8	032U5702	-	5
017-424066	-	22	032H8005	-	4	032U162402	-	8	032U5704	-	5
017-436066	-	21, 32	032H8006	-	4	032U162416	-	8	032U5705	-	5
017-437066	-	32	032H8007	-	4	032U162431	-	8	032U5706	-	5
017-500366	-	30	032H8008	-	4	032U300399	-	7	032U5707	-	5
017-500466	-	30	032H8009	-	4	032U300484	-	8	032U5708	-	5
017-500666	-	30	032H8014	-	4	032U300499	-	7	032U5709	-	5
017-502266	-	30	032H8015	-	4	032U300584	-	8	032U5710	-	5
017-503666	-	30	032H8016	-	4	032U300599	-	7	032U5815	-	6
017-504866	-	30	032H8017	-	4	032U300682	-	8	032U5820	-	6
017-506066	-	30	032H8018	-	4	032U300684	-	8	032U5832	-	6
017-513566	-	30	032H8087	-	5	032U300699	-	7	032U5840	-	6
017-513666	-	30	032H8089	-	5	032U300784	-	8	032U5850	-	6
017-513966	-	30	032H8095	-	5	032U300799	-	7	032U6015	-	9
017-514066	-	30	032H8097	-	5	032U3171	-	9	032U7115	-	6
017-514166	-	30	032H8099	-	5	032U3172	-	9	032U7116	-	6
017-515566	-	30	032H8125	-	5	032U3173	-	9	032U7117	-	6
017-518166	-	18	032K140902	-	13	032U3601	-	5	032U7120	-	6
017-518266	-	18	032K143682	-	13	032U3605	-	5	032U7121	-	6
017-518766	-	18	032K143684	-	13	032U3606	-	5	032U7122	-	6
017-518866	-	18	032K143685	-	13	032U3607	-	5	032U7125	-	6
017-518966	-	18	032U0150	-	10	032U3608	-	5	032U7126	-	6
017-519166	-	18	032U0296	-	9	032U3615	-	5	032U7127	-	6
017-519266	-	18	032U1060	-	9	032U3616	-	5	032U7132	-	6
017-519666	-	18	032U1063	-	9	032U3617	-	5	032U7133	-	6
017-520366	-	18	032U1065	-	9	032U3618	-	5	032U7134	-	6
017-520466	-	18	032U1066	-	9	032U3619	-	5	032U7140	-	6
017-520866	-	30	032U1068	-	9	032U3620	-	5	032U7141	-	6
017-521466	-	30	032U1070	-	9	032U3621	-	5	032U7142	-	6
017-521566	-	18	032U1071	-	9	032U3622	-	5	032U7150	-	6
017-522066	-	30	032U1072	-	9	032U3623	-	5	032U7151	-	6
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017-522766	-	30	032U1074	-	9	032U3629	-	5	032U7170	-	6
017-523166	-	30	032U1075	-	9	032U3642	-	5	032U7171	-	6
017-523766	-	18	032U1076	-	9	032U3643	-	5	032U7172	-	6
017-523866	-	18	032U1077	-	9	032U451402	-	8	032U7173	-	6
017-523966	-	18	032U1078	-	9	032U451416	-	8	032U7174	-	6
017-525566	-	18	032U1079	-	9	032U451431	-	8	032U7175	-	6
017-526266	-	18	032U1080	-	9	032U453002	-	8	032U7180	-	6
017-526966	-	18	032U1081	-	9	032U453016	-	8	032U7181	-	6
017-529166	-	18	032U1082	-	9	032U453031	-	8	032U7182	-	6
017-529566	-	18	032U1236	-	6	032U453402	-	8	032U7183	-	6
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018F6707	-	12	032U1241	-	6	032U456816	-	8	037H001831	-	36
018F6732	-	12	032U1242	-	6	032U456831	-	8	037H002113	-	36
018F6757	-	12	032U1246	-	6	032U458502	-	8	037H002116	-	36
018F6857	-	12	032U1247	-	6	032U458516	-	8	037H002131	-	36
018F7301	-	13	032U1249	-	6	032U458531	-	8	037H002132	-	36
018F7351	-	12	032U1251	-	6	032U460402	-	8	037H002137	-	36
			032U1252	-	6	032U460416	-	8	037H002231	-	36
			032U1255	-	6	032U460431	-	8	037H003116	-	36

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037H003132 -	36	037H346002 -	36	042U4031 -	4	047H1017 -	40
037H003137 -	36	037H6062 -	39	042U4032 -	4	047H1018 -	40
037H003231 -	36	037H6072 -	39	042U4041 -	4	047H3063 -	40
037H004116 -	37	037H6078 -	39	042U4042 -	4	047H3065 -	40
037H004131 -	37	037H6084 -	39	042U4053 -	4	047H3066 -	40
037H004137 -	37	037H6087 -	39	042U4063 -	4	047H3067 -	40
037H004531 -	37	037H6088 -	39	042U4074 -	4	047H3068 -	40
037H004931 -	36	037H6461 -	39	042U4082 -	4	047H3075 -	43
037H005031 -	36	037H6462 -	39	042U4084 -	4	047H3076 -	43
037H005116 -	37	037H6463 -	39	042U4085 -	4	047H3092 -	43
037H005131 -	37	037H6469 -	39	042U4086 -	4	047H3093 -	43
037H005132 -	37	037H6472 -	39	042U4087 -	4	047H3099 -	43
037H005137 -	37	037H6478 -	39	042U4088 -	4	047H3104 -	43
037H005531 -	37	037H6479 -	39	042U4089 -	4	047H3105 -	43
037H005532 -	37	037H6484 -	39	042U4092 -	4	047H3111 -	43
037H005631 -	37	037H6487 -	39	047B010266 -	39	047H3112 -	43
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037H007131 -	37	037H807166 -	36	047B010666 -	39	060-062866 -	32
037H007132 -	37	037H807366 -	37	047B3014 -	42	060-104766 -	21, 27
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037H008031 -	37	037N0039 -	44	047B3040 -	42	060-113366 -	19
037H010066 -	39	037N0040 -	44	047B3042 -	42	060-118966 -	19
037H010466 -	39	037N0045 -	44	047B3049 -	42	060-121766 -	19
037H010666 -	39	037N0046 -	44	047B3051 -	41	060-310066 -	18
037H0110 -	38	037N0062 -	44	047B3052 -	41	060-310166 -	19
037H0111 -	38	037N0070 -	44	047B3053 -	41	060-310266 -	19
037H0112 -	38	037N0074 -	44	047B3054 -	41	060-310366 -	18
037H0113 -	38	037N0076 -	44	047B3055 -	41	060-310466 -	18
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037H306113 -	37	037N0096 -	44	047B3059 -	41	060-310866 -	18
037H306132 -	37	037N0097 -	44	047B3061 -	42	060-310966 -	18
037H306213 -	37	037N0111 -	44	047B3091 -	42	060-311066 -	18
037H306232 -	37	037N0112 -	44	047B3142 -	41	060-312066 -	18
037H306313 -	37	037N0150 -	45	047B3143 -	41	060-312166 -	18
037H306332 -	37	037N0151 -	45	047B3144 -	41	060-312266 -	19
037H3064 -	38	037N0152 -	45	047B3145 -	41	060-313066 -	22
037H3065 -	38	037N0153 -	45	047B3146 -	41	060-315066 -	19
037H3069 -	38	042N0139 -	13	047B3147 -	41	060-315166 -	19
037H308122 -	37	042N0156 -	13	047B3148 -	41	060-316066 -	19
037H308131 -	37	042N0800 -	11	047B3149 -	41	060-316166 -	19
037H308137 -	37	042N0802 -	11	047B3150 -	41	060-316266 -	19
037H308222 -	37	042N0803 -	11	047B3151 -	41	060-333266 -	21, 27
037H308231 -	37	042N0821 -	11	047B3152 -	41	060-333366 -	21, 27
037H308237 -	37	042N0823 -	11	047B3164 -	41	060-508166 -	19
037H311413 -	36	042N0824 -	11	047B3165 -	41	060-538666 -	19
037H311432 -	36	042N0840 -	11	047B3198 -	42	060-538766 -	19
037H311513 -	36	042N0842 -	11	047B3200 -	42	060G0005 -	28
037H311532 -	36	042N0843 -	11	047B3203 -	42	060G0007 -	28
037H311613 -	36	042N0844 -	11	047B3284 -	42	060G0008 -	28
037H311623 -	36	042N0848 -	11	047B3285 -	42	060G0252 -	27
037H311632 -	36	042N4400 -	16	047H0170 -	38	060G1034 -	28
037H311633 -	36	042N4402 -	16	047H0173 -	38	060G1105 -	24
037H311713 -	36	042N4404 -	16	047H0174 -	38	060G1106 -	24
037H311723 -	36	042N4406 -	16	047H0175 -	38	060G1107 -	24
037H311732 -	36	042N4408 -	16	047H0180 -	38	060G1109 -	24
037H311813 -	36	042N4409 -	16	047H0181 -	38	060G1111 -	24
037H311832 -	36	042N4411 -	16	047H0183 -	38	060G1113 -	24
037H314302 -	36	042N4451 -	16	047H0184 -	38	060G1122 -	24
037H314402 -	36	042N4452 -	16	047H0185 -	38	060G1123 -	24
037H314502 -	36	042N4453 -	16	047H0190 -	38	060G1124 -	24
037H314602 -	36	042N4454 -	16	047H0200 -	40	060G1125 -	24
037H3151 -	38	042N4455 -	16	047H0201 -	40	060G1133 -	24
037H3152 -	38	042N7501 -	12	047H0202 -	40	060G1151 -	25
037H321013 -	36	042N7502 -	12	047H0203 -	40	060G1152 -	25
037H321032 -	36	042N7504 -	12	047H0204 -	40	060G1153 -	25
037H321113 -	36	042N7508 -	12	047H0205 -	40	060G1408 -	25
037H321132 -	36	042N7510 -	12	047H0206 -	40	060G1430 -	24
037H3231 -	38	042N7512 -	12	047H0207 -	40	060G1438 -	25
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061B500166 -	20		
061B500266 -	20		
061B6002 -	27		
061B6003 -	27		
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061B720201 -	28		

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Use our website - the fastest route to product information on our entire product range, technical datasheets for download and much more on <http://www.danfoss.com>. The site will guide you through to all the information you need.

The image displays a sequence of four screenshots from the Danfoss website, illustrating the user journey from the homepage to a specific product page. Blue arrows indicate the flow of navigation between the pages.

- Top Screenshot (Homepage):** Shows the main navigation menu with links for 'Products', 'Business Areas', 'News & Events', 'Life & Career', and 'Contact'. A 'Product Finder' sidebar is visible on the left. The main content area features a headline 'Making modern living possible' and a 'New Training and Education Area' section.
- Second Screenshot (Industrial Automation Page):** Shows the 'Industrial Automation' product page. It includes a navigation sidebar, a main heading 'Industrial Automation', and a 'Value for customers' section. A 'Frequently asked questions' section is also present.
- Third Screenshot (Product Page):** Shows a detailed product page for 'Industrial Valves'. It features a navigation sidebar, a main heading 'Industrial Valves', and a 'Value for customers' section. A 'Frequently asked questions' section is also present.
- Bottom Screenshot (Product Catalog Page):** Shows a 'Technical Solutions' page with a navigation sidebar and a main heading 'Technical Solutions'. It features a 'Search catalogue' button and a grid of product categories including 'Industrial Valves', 'Pressure Working & Control', 'Suspended Working & Control', 'Control & Meter', and 'Accessories & Spare Parts'.

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