

How to Order a Condor Pressure Switch

Q1. 240 volts single phase or 415 volts 3 phase?

240 VAC = MDR2

- A. What pressure range 600 (P/N 3010550) or 1100 kPa?
- B. For 1100 kPa, do you need single port (P/N 3011300) or 4 port?
- C. If you need 4 port do you need standard unloader (P/N 3013268) or slow release unloader (P/N 3013265)

415 VAC = MDR 3, 4 or 5

- A. What size is the motor?
 - B. Below 2 H.P. use MDR4?
 - C. If above 2 H.P. do you need thermal over load, if so use MDR 3 or 5.

MDR4S: No thermal cut out fitted, max 16 Amps

- A. What pressure range, 600, 1100 or 1600 kPa?
- B. Do you need a manual On/Off switch (Rotary type "EA")?
- C. Do you need an unloader, if so, is EV4i O.K. if not choose correct unloader?
- D. Do you need single or single with gauge port?

MDR4SU: No thermal cut out fitted, max 16 Amps (Reverse Acting)

- A. What pressure range, 600, 1100 or 1600 kPa?
- B. Do you need a manual On/Off switch (Rotary type "EA")?

MDR5: Thermal over load available, max 14 Amps with 25 Amp contact rating.

- A. What pressure range 500, 800, 1100 or 1600 kPa?
- B. Do you need a manual On/Off switch (Push button "K")?
- C. Do you need thermal overload, If so, which one:
 - 2.4 to 4.2 Amps, or 4.0 to 7.0 Amps, or
 - 6.1 to 10.3 Amps, or 9.0 to 14.0 Amps.
- D. Do you need an unloader, if so, what type?

MDR3: Thermal over load available, max 24 Amps with 25 Amp contact rating

- A. What pressure range 600, 1100, 1600 or 2500 kPa?
- B. Do you need a manual On/Off switch (Rotary Type "EA")?
- C. Do you need thermal overload, If so, which one:
 - 4.0 to 6.3 Amps, or 6.3 to 10.0 Amps, or
 - 10.0 to 16.0 Amps, or 16.0 to 20.0 Amps, or
 - 20.0 to 24.0 Amps
- D. Is the standard unloader O.K.? if not, what type do you require?
- E. For 1100 kPa or 1600 kPa, do you need single or 4 port?
- F. Do you need shunt release relay?
- G. Do you need under voltage relay?
- H. Do you need "RM" diaphragm?

SWITCHES FOR CONTROL CIRCUITS

MDR 43: Physically smaller unit

Pressure ranges
300, 600, 1100 or 1600 kPa

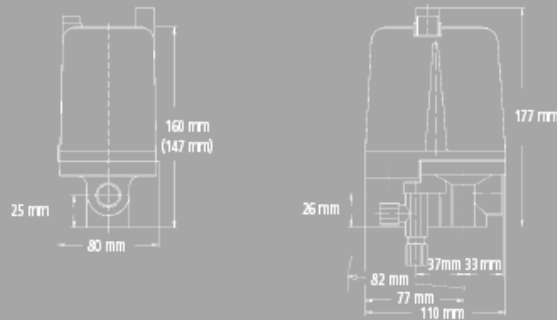
MDR 53: With tighter differential

Pressure ranges
800 or 1600 kPa

Pressure switch MDR 5



3-phase; Switching capacity 5.5 kW
available with overload relay
max. cut-off pressure 16 bar



TECHNICAL DATA

acc. to EN 60947

Rated insulation voltage U_i	500 V	Max. mechanical cycles Cycles/h	600
Motor switching capacity (AC 3) $U_e = 240$ V (1~)	2.5 kW	Rated operating current I_b	25 A
Motor switching capacity (AC 3) $U_e = 230$ V (3~)	4.0 kW	Bursting strength P_z	> 40 bar
Motor switching capacity (AC 3) $U_e = 400$ V (3~)	5.5 kW	Permissible medium temperature Air	-5...+ 80 °C
Motor switching capacity (AC 3) $U_e = 500$ V (3~)	4.0 kW	Permissible medium temperature Water	+ 80 °C
Electrical life (AC 3) Cycles	> 1 x 10 ⁶	Protection acc. to EN 60529	IP 54
Mechanical life Cycles	> 1 x 10 ⁶	Conductor cross-section 1 ... flexible cable 1 x / 2 x	2.5 / 2.5 mm ²
Max. electrical cycles Cycles/h	120	Conductor cross-section 1 ... rigid cable 1 x / 2 x	4 / 4 mm ²

resistance
Air · Water Sodium chloride · Hydrogen
limited resistance
Fats Mineral oils
non-resistance
Acids · Lye solutions · Sulfur Fuels · Solvents

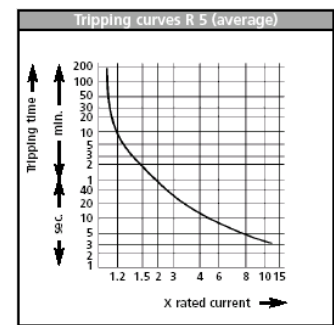
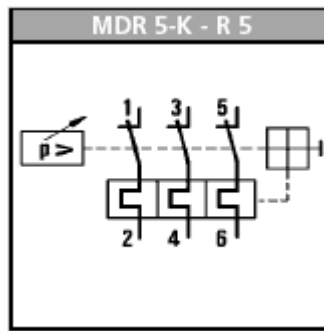
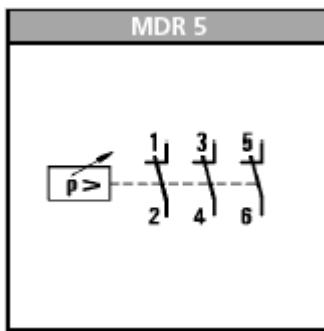
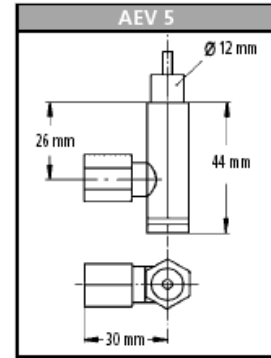
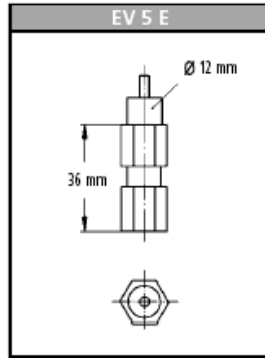
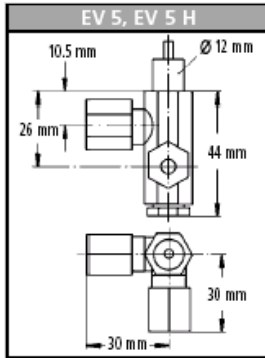
Condor Code	ON/OFF switch	Pressure Range In kPa	Connection	Thermal Overload (Amps)	Weight (gms)	Part Number
500 kPa						
MDR5/500 G1/2 2PG16V	-	150-500	½" BSP F	-	870	3200000
800 kPa						
MDR5/800 G1/2 2PG16V	-	200-800	½" BSP F	-	870	3210000
1100 kPa						
MDR5/1100 G1/2 2PG16V	-	200-1100	½" BSP F	-	870	3230000
MDR5/1100K G1/2 2PG16V	K	200-1100	½" BSP F	-	880	3310000
Switches with thermal overload protection						
MDR5/1100K G1/2 R5/4.2 2PG16V	K	200-1100	½" BSP F	2.4-4.2	1040	3410000
MDR5/1100K G1/2 R5/7.0 2PG16V	K	200-1100	½" BSP F	4.0-7.0	1040	3420000
MDR5/1100K G1/2 R5/10.3 2PG16V	K	200-1100	½" BSP F	6.1-10.3	1040	3440000
MDR5/1100K G1/2 R5/14 2PG16V	K	200-1100	½" BSP F	9-14	1050	3470000
1600 kPa						
MDR5/1600 G1/2 2PG16V	-	250-1600	½" BSP F	-	870	3240000
MDR5/1600K G1/2 2PG16V	K	250-1600	½" BSP F	-	870	3320000

Condor Code	Description	Weight (gms)	Part Number
Unloader valves			
EV5E	With screw fitting for 6 mm plastic or copper discharge line	100	3911050
EV5Ei	With screw fitting for ¼" plastic or copper discharge line	100	3911051
EV5i	With screw fitting for ¼" plastic or copper discharge line	100	3911000
Unloader valves for difficult motor starting conditions			
AEV5i	With screw fitting for ¼" plastic or copper discharge line	100	3911100
Cable Glands			
PG16V	Complete	12	3919210
Cover			
H5	Cover without push-buttons	130	3917000
H5-K	Cover with push-buttons for manual On/Off switching	130	3918000
Thermal, 3-pole overload relay			
SK5	Contact block	95	3919150
R5/2.45	1.50 - 2.45 Amps	150	3620000
R5/4.2	2.40 - 4.20 Amps	150	3630000
R5/7.0	4.00 - 7.00 Amps	150	3640000
R5/10.3	6.10 - 10.30 Amps	150	3650000
R5/14	9.00 - 14.00 Amps	150	3660000



Rev 01/05

Pressure switch MDR 5



Pressure Diagrams

