



ENGLISH

Datasheet

Stock No: 121-6860

RS Pro Motor Protection Switch

Specifications:

- Versions: - MS32 - with thermal and magnetic releases
- Manual control: - START, STOP, push-buttons - with a trip indication (i.e. push-buttons stay in the middle position)
- Automatic switch-off at over-current with thermal or magnetic release
- Control with under-voltage release or shunt release
- An auxiliary switch for side mounting or flush mounting used for indication of the switching state
- Indication of release with trip indicating auxiliary switch
- ON/OFF buttons position unequivocally indicates switching position of main circuit contacts
- Contact material - Resistant to contact welding - Enables low contact heating
- Isolating distance between contacts: 4.5 mm per contact place
- Connection of a rigid or flexible conductor
- Assembly to 35 mm wide mounting rail in compliance with EN 60715
- Vertical or horizontal operational position

Technical Specification

GENERAL	Standards			IEC/EN 60947-2, IEC/EN 60947-4-1, IEC/EN 60947-5-1, IEC/EN 60204, UL 508, CSA 22.2 No.14
	Approvals			UL
	Climatic class			constant damp heat acc. to IEC 60068-2-78 cyclic damp heat acc. to IEC 60068-2-30
	Degree of protection			IP20, after terminals covering IP40
	Ambient temperature		°C	-25 ... +60
	Storage temperature		°C	-25 ... +70
	Temperature range of thermal compensation for overload release		°C	-5 ... +40
	Mechanical and electrical endurance		op. c.	100,000
	Max. operating cycles		op. / h	25
	Shock resistance acc. to IEC 68-2-27		g	20
	Vibration resistance acc. to IEC 68-2-6			5 g at f = 5 ... 150 Hz
	Overvoltage category / pollution degree			III / 3
	Rated insulation voltage	U_i	V	690
	Rated impulse withstand voltage	U_{imp}	kV	6
Weight		kg	0.279	
MAIN CIRCUIT	Designation of connection terminals			1 - L1 ; 3 - L2 ; 5 - L3 ; 2 - T1 ; 4 - T2 ; 6 - T3
	Terminal capacity	rigid flexible	S	mm ² 0.75 ... 10 0.75 ... 6
	Screw			with self-lifting clamp, protected against drop out
	Screw head			PZ2
	Tightening torque		Nm	2.0

Technical Specification

MAIN CIRCUIT			MS32 / MS18	MSB32 / MSB18	
	Max. operational voltage	U_e	V	690	400
	Setting range		A	0.1 - 0.16; 0.16 - 0.25; 0.25 - 0.4; 0.4 - 0.63; 0.63 - 1; 1 - 1.6; 1.6 - 2.5; 2.5 - 4; 4 - 6.3; 6.3 - 10; 9 - 14; 13 - 18; 17 - 23 (only MS32); 20 - 27 (only MS32); 25 - 32 (only MS32)	0.25 - 0.4; 0.4 - 0.63; 0.63 - 1; 1 - 1.6; 1.6 - 2.5; 2.5 - 4; 4 - 6.3; 6.3 - 10; 9 - 14; 13 - 18; 17 - 23 (only MSB32); 20 - 27 (only MSB32); 25 - 32 (only MSB32)
	No. of poles			3	
	Operating current of thermal overload release	I		$1,05 I_r < I \leq 1,20 I_r$ I_r ...current setting value	
	Sensitivity to phase failure			yes	
	Power dissipation per pole at the upper setting limit	P	W	2 - 2,5	
	Utilization category acc. to IEC/EN 60947-4-1			AC-3	
	acc. to IEC/EN 60947-2			A	
	Trip class acc. To IEC/EN 60947-4-1			10	

Technical Specification

Standard motor powers						Setting range
Single-phase	Three-phase					
220 V 230 V 240 V	220 V 230 V 240 V	380 V 400 V 415 V	440 V	500 V	660 V 690 V	
kW						A
					0.06	0.1 ... 0.16
		0.06	0.06	0.06 ... 0.9	0.06 ... 0.12	0.16 ... 0.25
	0.06	0.09	0.12	0.09 ... 0.12	0.18	0.25 ... 0.4
	0.09	0.12 ... 0.18	0.18	0.18	0.25	0.4 ... 0.63
0.06 ... 0.09	0.09 ... 0.12	0.18 ... 0.25	0.25 ... 0.37	0.25 ... 0.37	0.37 ... 0.55	0.63 ... 1
0.12	0.18 ... 0.25	0.37 ... 0.55	0.37 ... 0.55	0.55 ... 0.75	0.75 ... 1.1	1 ... 1.6
0.18 ... 0.25	0.37	0.75	0.75 ... 1.1	1.1	1.5	1.6 ... 2.5
0.37	0.55 ... 0.75	1.1 ... 1.5	1.5	1.5 ... 2.2	2.2 ... 3	2.5 ... 4
0.55 ... 0.75	1.1 ... 1.5	2.2	2.2 ... 3	2.2 ... 3	4	4 ... 6.3
1.1 ... 1.5	1.5 ... 2.2	3 ... 4	4	4 ... 5.5	5.5 ... 7.5	6.3 ... 10
2.2	2.2 ... 3	5.5	5.5 ... 7.5	5.5 ... 7.5	9 ... 11	9 ... 14
3	4	7.5	7.5 ... 9	9 ... 11	15	13 ... 18
	5.5	9 ... 11	11	11	15 ... 18.5	17 ... 23
	5.5 ... 7.5	11	11	15	18.5 ... 22	20 ... 27
	7.5	15	15	18.5	22	25 ... 32

Technical Specification

Type	Operating current of short-circuit release (A)	Rated ultimate short-circuit breaking capacity I_{cu} , I_{cs} (kA)								Max. back-up fuse, if $I_{cp} > I_{cu}$ (gL) (A)			
		230 V		400 V		500 V		690 V		230 V	400 V	500 V	690 V
		I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}	I_{cu}	I_{cs}				
1216844	2	100	100	100	100	100	100	100	100	No back-up fuse required			
1216845	3	100	100	100	100	100	100	100	100				
1216846	5	100	100	100	100	100	100	100	100				
1216847	8	100	100	100	100	100	100	100	100				
1216848	13	100	100	100	100	100	100	100	100				
1216849	22	100	100	100	100	100	100	100	100				
1216850	33	100	100	100	100	100	100	5	5				
1216851	55	100	100	100	100	100	100	3	3			25	
1216852	84	100	100	100	100	6	4.5	3	2			35	35
1216853	126	100	100	100	100	6	4.5	3	2			50	35
1216854	170	25	12.5	25	12.5	6	4.5	3	2	80	63	50	50
1216855	230	25	12.5	25	12.5	6	4.5	3	2	80	63	50	50
1216856	270	25	12.5	25	12.5	4	3	3	2	80	80	50	50
1216857	360	25	12.5	25	12.5	4	3	3	2	80	80	50	50
1216858	400	25	12.5	25	12.5	4	3	3	2	80	80	50	50

Auxiliary Switch



Auxiliary switch
1216863 with 1 make and 1 broak contact
1216864 with 2 make contacts

Rated insulation voltage	U_i	V	500
Thermal current	I_{th}	A	5
Electrical rating acc. to IEC/EN 60947-5-1			
R300	AC-15	U_o	V 240
		I_e	A 1,5
R300	DC-13	U_e	V 250
		I_e	A 0,1
Terminal capacity	S	mm ²	0,75 ... 2,5
Tightening torque		Nm	1

HSV-Auxiliary Contact Block HRS-Trip Indicating Contact Block



1216865	Auxiliary contact block, 1 NO contact
1216866	Auxiliary contact block, 1 NC contact
1216867	Trip indicator block, 1 NO contact
1216868	Trip indicator block, 1 NC contact

Rated insulation voltage	U_i	V	300
Thermal current	I_{th}	A	1
Electrical rating acc. to IEC/EN 60047 5 1			
B300	AC 15	U_e	V 240
		I_e	A 1,5
R300	DC-13	U_e	V 125
		I_e	A 0,22
Terminal capacity	S	mm ²	0,75 ... 2,5
Tightening torque		Nm	1

UR-Under Voltage AR-Release Shunt



1216869	Under voltage release 240 Volt AC
1216870	Under voltage release 380 Volt AC
1216871	Shunt release 240 Volt AC
1216872	Shunt release 380 Volt AC

Control voltages	U_c	V	24 ... 600
Rated frequency	f	Hz	50 or 60
Terminal capacity	S	mm ²	0,75 ... 2,5
Tightening torque		Nm	1

MSK-Connection Blocks

Connection block RS 121-6873 is used for connecting a motor protection switch with a contactor forming a single-unit starter for quick assembly to a 35 mm wide mounting rail (EN 60715).



Accessories



1216859	Enclosure IP 41
1216860	Enclosure IP 55



121-6862	Padlock Feature
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