EPM Elektropřístroj	Technical data sheet	Contactors	16.12.2022
	DC controlled contactor	Registration code:	111 227 8R3 000
	C65.10 110 V DC DL	extended coil voltage range, DC control with a dual winding coil and surge suppresing varistor	

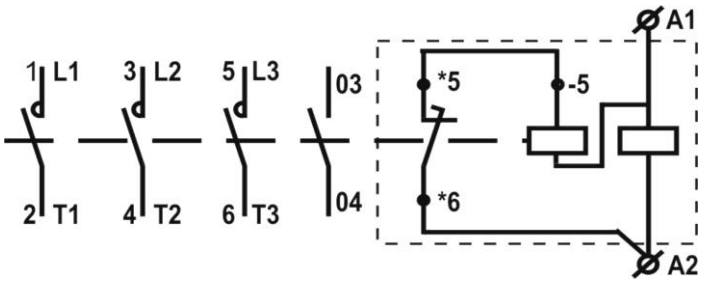
Rating			
Rated insulation voltage	U_i	1000	[V]
Impulse withstand voltage	U_{imp}	8	[V]
Overvoltage category according to ČSN EN 60947-1		III	[-]
Working environment - degree of pollution		3	[-]
Ambient temperature range		-50 .. +55	[°C]
Storage temperature		-55 .. +75	[°C]
Operating altitude		2000	[m]
Environmental conditions		any acc. to EN 60721-2-1	
Flammability of materials according to EN 60695-11-10 or UL94		V-0	[-]
Vibration and shock resistance according to ČSN EN 61373 ed. 2		category 1, class A	
Level of safety and reliability according to EN 13849-1		B10d = 2 000 000 cycles	
Outline dimensions W×H×D		70×107×116	[mm]
Mass		0.9	[kg]
Mass including unit packing		0.95	[kg]
Degree of protection acc. to VDE 0106, part 100		IP20/IP10	
Main poles			
Configuration		3 x NO	[-]
Conventional free air thermal current	I_{th}	115	[A]
Rated operational current:			
in AC-1 at 400 V	I_e	90	[A]
in AC-3 at 400 V	I_e	65	[A]
in AC-4 at 400 V	I_e	18	[A]
in DC-1 at 220 V DC (all three poles connected in series)	I_e	85	[A]
in DC-3 at 220 V DC (all three poles connected in series)	I_e	44	[A]
in DC-5 at 220 V DC (all three poles connected in series)	I_e	32	[A]
Max. output power of controlled motor in AC-3:			
at 230 V		18.5	[kW]
at 400 V		30	[kW]
at 500 V		37	[kW]
at 690 V		37	[kW]
Max. output power of controlled motor in AC-4:			
at 380-400 V		4,5	[kW]
at 500 V		5,5	[kW]
Max. on-load switching rate:			
in AC-1		300	[cycl/hour]
in AC-3		1200	[cycl/hour]
in AC-4		600	[cycl/hour]
Electrical durability in AC-1 at 400 V for rated op. current		0.5×10^6	[op. cycles]
Electrical durability in AC-3 at 400 V for rated op. current		10^6	[op. cycles]
Recommended fuse char. aM		80	[A]
Type of coordination with SCPD		1	
Mechanical durability		10×10^6	[op. cycles]
Voltage drop on each main pole	ΔU	45	[mV]
at the load current	I	80	[A]
Thermal dissipation on each main pole at the load current	P	3.8	[W]
Operating times from coil energization to			
closing of the N.O. contact		15	[ms]
opening of the N.C. contact		N/A	[ms]
Operating times from coil deenergization to			
opening of the N.O. contact		11	[ms]
closing of the N.C. contact		N/A	[ms]
Positively guided contacts according to IEC 60947-4-1 ed. 3 - Annex F (auxiliary contacts linked with power contacts - mirror contact).		N/A	
Terminal type		pillar terminal	
Screw type		combined PH2 + simple slots	
Screw size		M6	
Tightening torque		2.5	[Nm]
Max. conductor cross-section:			
Rigid		2.5 .. 25	[mm^2]
Flexible		2.5 .. 25	[mm^2]
Short time withstand currents from the cold state at the max. ambient temperature 40 °C:			
1 s	conductor cross-section 16 mm^2	770	[A]
5 s		620	
10 s		520	
30 s		330	
1 min		240	
3 min		140	
10 min		105	

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Auxiliary contact			
Configuration		1 x NO	
Rated insulation voltage	U_i	690	[V]
Impulse withstand voltage	U_{imp}	8	[V]
Conventional free air thermal current	I_{th}	12	[A]
Rated operational current in AC-15:			
at 230 V	I_e	4	[A]
at 400 V	I_e	2	[A]
Electrical durability in AC-15:			
at 230 V, 4 A		0.8×10^6	[cycles]
at 400 V, 2 A		10^6	[cycles]
Operating times from coil energization to			
closing of the N.O. contact		14	[ms]
opening of the N.C. contact		N/A	[ms]
Operating times from coil deenergization to			
opening of the N.O. contact		15	[ms]
closing of the N.C. contact		N/A	[ms]
Terminal type		screw-type terminal	
Screw type		combined PH2 + simple slots	
Screw size		M3.5	
Tightening torque		0.8	[Nm]
Max. conductor cross-section:			
Rigid		1..2.5	[mm^2]
Flexible		0.75 .. 1.5	[mm^2]

Control circuit			
Rated control voltage		110 V DC	[V]
Tolerance of control voltage		-30 .. +25	[%]
Drop-out voltage		56	[V]
Pull-in input power of DC control coil ±10%		128	[W]
Hold-in input power of DC control coil ±10%		2.9	[W]
Terminal type		screw-type terminal	
Screw size		M3.5	
Tightening torque		0.8	[Nm]
Max. conductor cross-section:			
Rigid		1 .. 2.5	[mm^2]
Flexible		0.75 .. 1.5	[mm^2]

Marking of terminals



All terminals facilitate connecting of either single conductor up to the maximum cross-section, or two conductors of the same or by one degree different cross-sections except for the maximum one. Flexible conductors must not be compacted by brazing.

Ecological sustainability	
REACH Regulation	REACh Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant
Mercury free	Yes
OEEZ - certificate of involvement in the system	AK-6-019136