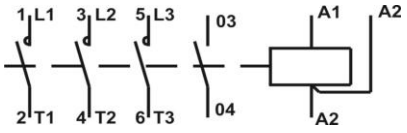
EPM Elektropřístroj	**Technical data sheet**	**Contactors**	**Date: 19. 1. 2024**
	**AC controlled contactor**	**Designation / Marking:**	
	C12.10 with AC coil	**C12.10 _ _ V / _ _ Hz** _ _ rated control voltage / _ _ rated control frequency	

Technical data			
Rated insulation voltage	U_i	690	[V]
Impulse withstand voltage	U_{imp}	8	[kV]
Overvoltage category according to ČSN EN 60947-1		III	[-]
Working environment - degree of pollution		3	[-]
Ambient temperature range		-50 .. +60	[°C]
Storage temperature		-55 .. +80	[°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	
Main dimensions W x H x D		45 x 78,5 x 73	[mm]
Mass		0,34	[kg]
Mass including unit packing		0,36	[kg]
Degree of protection acc. to VDE 0106, part 100		IP20	
Main poles			
Number and type of contacts		3 x NO	
Conventional free air thermal current	I_{th}	32	[A]
Rated operational current I_e			
in AC-1 at 400 V	I_e	25	[A]
in AC-1 at 500 V	I_e	25	
in AC-3 at 400 V	I_e	13,2	
in AC-4 at 400 V	I_e	5,6	
in DC-1 at 220 V DC (all three poles connected in series)	I_e	25	
in DC-3 at 220 V DC (all three poles connected in series)	I_e	12	
in DC-5 at 220 V DC (all three poles connected in series)	I_e	8	
Max. output power of controlled motor in AC-3			[kW]
at 220-230 V		3	
at 380-400 V		6,5	
at 500 V		7,5	
at 660-690 V		7,5	
Max. output power of controlled motor in AC-4:			
at 380-400 V		2,5	[kW]
at 500 V		3	
Short time withstand currents from the cold state at the max. ambient temp. 40 °C:			
1 sec	Min. conductor cross section 2,5 mm^2	228	[A]
5 sec		155	
10 sec		125	
30 sec		78	
1 min		60	
3 min		40	
10 min		30	
Max. number of on-load op. cycles per hour			[op. cycles/hour]
in AC-1		300	
in AC-3		1200	
in AC-4		600	
Recommended fuse char. aM		16	[A]
Type of coordination according to IEC 60947-4-1		2	
Mechanical durability		$10x10^6$	[op. cycles]
Electrical durability in AC-1 at 400 V for rated op. current		$0,15×10^6$	
Electrical durability in AC-3 at 400 V for rated op. current		$1,5 x 10^6$	
Dissipation on main pole (ea)	ΔU	48	[mV]
	I	25	[A]
Power dissipation per pole	P	1,2	[W]
Operating times from coil energization to			
closing of the N.O. contact		12,7 - 16,6	[ms]
opening of the N.C. contact		non aplicable	[ms]
Operating times from coil deenergization to			
opening of the N.O. contact		7,1 - 12,2	[ms]
closing of the N.C. contact		non aplicable	[ms]
Positively guided contacts acc. to IEC 60947-4-1/A1 ed. 2 - Annex F (auxi. contacts linked with power contacts - mirror contact).		non aplicable	
Terminal type		Screw-type	
Screw type / Screw size		combined PH2 + simple slots / M3,5	
Tightening torque		0,8	[Nm]
Conductor cross-section:			
Rigid		1..4	[mm^2]
Flexible		1..2,5	[mm^2]

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Auxiliary contacts			
Configuration		1 x NO	
		can be completed with additional blocks PK or PKB	
Rated insulation voltage	U_i	690	[V]
Impulse withstand voltage	U_{imp}	8	[kV]
Conventional free air thermal current	I_{th}	25	[A]
Rated operational current in AC-15:			
at 220-230 V	I_e	4	[A]
at 380-400 V	I_e	2	[A]
Electrical durability in AC-15:			
at 220-230 V, 4 A		$0,8 \times 10^6$	[op. cycles]
		1×10^6	[op. cycles]
Dissipation on aux. pole (ea)	ΔU	20	[mV]
	I	4	[A]
Power Disipation for one aux. pole NO	P	0,08	[W]
Operating times from coil energization to			
closing of the N.O. contact		17 .. 22	[ms]
opening of the N.C. contact		non aplicable	[ms]
Operating times from coil deenergization to			
opening of the N.O. contact		9,1 .. 12	[ms]
closing of the N.C. contact		non aplicable	[ms]
Positively guided contacts according to IEC 60947-5-1/A2 ed. 2 - Annex L (mechanically linked contacts).		non aplicable	
Terminal type		screw-type terminal	
Screw type / Screw size		combined PH2 + simple slots / 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		AC	[V]
Tolerance of control voltage		-15 .. +10	[%]
Drop-out voltage		>25% Uc	
Pull-in input power of AC control coil ±10%		60	[VA]
Hold-in input power of AC control coil ±10%		10,5 / 3,9	[VA/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			
			
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	