

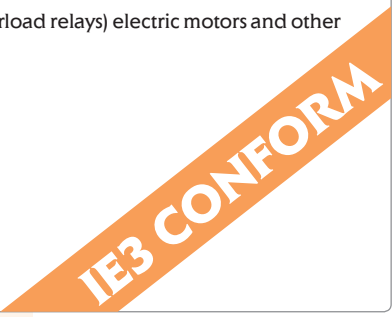
Motor contactor CEM

Application

Contactors are used to remotely control and protect (in combination with overload relays) electric motors and other electric loads with nominal power up to 160kW (at 400V AC3 duty).

Advantages

- Mounting on DIN rail and mounting plates
- High technical performance
- Low power loss (current heat loss)
- Protection against direct contact from front (IEC 536) IP20
- Wide range of accessories
- Surge suppressor (as option)
- Control voltage 24VAC, 48VAC, 110VAC, 230VAC, 400VAC



ETICON



Ordering:

CEM9.01-230V-50/60Hz

I(AC3)[A] Coil voltage

Nr. of NO Nr. of NC - Number and type of auxiliary contacts

Advantages



→ The possibility of replacing the coil to other rated voltage. (AC coil compatible only with AC contactor. DC coil compatible only with DC contactor)



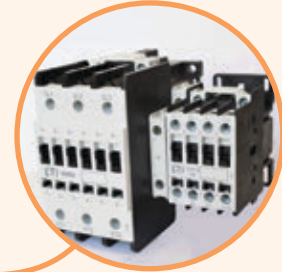
→ Surge suppressors can be mounted as close as possible to source (coil).



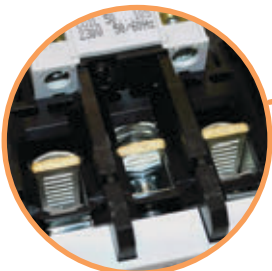
→ Lateral (side mounting) of auxiliary contacts.



→ Front mounted auxiliary contacts



→ Mechanical interlock can lock two different size contactors



→ Special designed terminals provide reliable contact with cables.



→ Up to CEM105 possible to mount on DIN rail TH35 or directly on panel.



→ Overload relay (bimetal) can be mounted directly on contactor or on DIN rail TH35 by using an adapter

Motor contactor CEM9.10; 25A(AC1); 9A; 4kW(AC3)*				
Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
CEM9.10-24V-50/60Hz	004642120		295	1
CEM9.10-48V-50/60Hz	004642121		295	1
CEM9.10-110V-50/60Hz	004642122		295	1
CEM9.10-230V-50/60Hz	004642123		295	1
CEM9.10-400V-50/60Hz	004642124		295	1
CEM9.10-24V DC	004642220		510	1
CEM9.10-220V DC	004642221		510	1

* Auxiliary contact 1NO integrated

Motor contactor CEM9.01; 25A(AC1); 9A; 4kW(AC3)*				
Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
CEM9.01-24V-50/60Hz	004642110		295	1
CEM9.01-48V-50/60Hz	004642111		295	1
CEM9.01-110V-50/60Hz	004642112		295	1
CEM9.01-230V-50/60Hz	004642113		295	1
CEM9.01-400V-50/60Hz	004642114		295	1
CEM9.01-24V DC	004642210		510	1
CEM9.01-220V DC	004642211		510	1

* Auxiliary contact 1NC integrated

Motor contactor CEM12.10; 25A(AC1); 12A; 5.5kW(AC3)*				
Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
CEM12.10-24V-50/60Hz	004643120		295	1
CEM12.10-48V-50/60Hz	004643121		295	1
CEM12.10-110V-50/60Hz	004643122		295	1
CEM12.10-230V-50/60Hz	004643123		295	1
CEM12.10-400V-50/60Hz	004643124		295	1
CEM12.10-24V DC	004643220		510	1
CEM12.10-220V DC	004643221		510	1

* Auxiliary contact 1NO integrated

Motor contactor CEM12.01; 25A(AC1); 12A; 5.5kW(AC3)*				
Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
CEM12.01-24V-50/60Hz	004643110		295	1
CEM12.01-48V-50/60Hz	004643111		295	1
CEM12.01-110V-50/60Hz	004643112		295	1
CEM12.01-230V-50/60Hz	004643113		295	1
CEM12.01-400V-50/60Hz	004643114		295	1
CEM12.01-24V DC	004643210		510	1
CEM12.01-220V DC	004643211		510	1

* Auxiliary contact 1NC integrated



For auxiliary contact blocks, see page 230



Mechanical interlock

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
BLIME 9-105	004643601	CEM9-CEM105	50	1
BLIME 112-300E	004643602	CEM112(E)-CEM300(E)	150	1

**Surge suppressor**

Type	Code No.	Coil voltage	For use with	Weight [g]	Packaging [pcs]
BAMRCE4	004642701	24-48 VAC	CEM9-CEM40	14	1
BAMRCE5	004642702	50-127 VAC	CEM9-CEM40	14	1
BAMRCE6	004642703	130-250 VAC	CEM9-CEM40	14	1
BAMRCE7	004642705	24-48 VAC	CEM50-CEM105	14	1
BAMRCE8	004642706	50-127 VAC	CEM50-CEM105	14	1
BAMRCE9	004642707	130-250 VAC	CEM50-CEM105	14	1
BAMDIE10	004643701	12-600 VDC	CEM9-CEM105	14	1
BAMRCE13	004642708	24-48 VAC	CEM112-CEM250	14	1
BAMRCE14	004642711	50-250 VAC	CEM112-CEM250	14	1



Contactors CEM up to 132 kW Technical Data

Type	CEM 9 to CEM 18	CEM25	CEM32 and CEM40	CEM50 and CEM80	CEM95 and CEM105	CEM112E and CEM 150E	CEM180E	CEM250E and CEM300E
Main terminal capacity (mm²)								
Solid, stranded and finely stranded without end sleeve		2x (1...2,5) 2x (2,5...6) 2x (0,25...2,5)	2x (1...2,5) 2x (2,5... 10) 2x (1...2,5)					
Finely stranded with end sleeve		2x (2,5...6) 2x (13...16)	2x (2,5...10) 2x (13...17)					
One conductor on top								
Stranded			0,75...16	1...35	1,5...50			
Stranded with end sleeve			0,75...16	1...35	1,5...50			
Stranded without end sleeve				1...16	1,5...35	2,5...50		
Finely stranded				1...16	1,5...35	2,5...50		
One conductor on bottom								
Solid			1...16	2,5...35	4...35			
Stranded with end sleeve			1... 16	2,5...35	4...35			
Stranded without end sleeve				1,5...16	6...35	6...35		
Finely stranded				1,5...16	6...35	6...35		
Two conductors on top								
Solid			0,75...16	1...35	1,5...50			
Stranded with end sleeve			0,75...16	1...35	1,5...50			
Stranded without end sleeve				1...16	1,5...35	2,5...50		
Finely stranded				1...16	1,5...35	2,5...50		
Two conductors on bottom								
Solid			1...16	2,5...35	4...35			
Stranded with end sleeve			1...16	2,5...35	4...35			
Stranded without end sleeve				1,5...16	6...35	6...35		
Finely stranded				1,5...16	6...35	6...35		
Solid and stranded with end sleeve Bar						2 x (25...70) 2 x (15x3)	2 x (50...120) 2 x (20x3)	2 x (50...150) 2 x (30x5)
Tightening torque (N.m)		1...1,9	1,6...3	2,5...4	4...6	5...6,5	10	13

Auxiliary contacts

Type	CEM9	CEM12	CEM18	BCXMF...	BCXMLE ...
Rated insulation voltage Ui					
acc. IEC/EN 60 947 (V)		1000			1000
Rated operational voltage Ue					
(V)		690			690
Conv. thermal current Ith					
(A)		20			10
Rated operational current Ie					
AC-15	220 - 240 V (A)	10			6
	380 - 400 V (A)	6			4
	415 V (A)	5			3,5
	500 V (A)	4			2,5
DC-13	24 V (A)	6			6
	48 V (A)	4			4
	110 V (A)	2			2
	220 V (A)	0,7			0,7
Making capacity Im					
AC-15/AC-11	Ue ≤ 400 V 50/60 Hz (A)	250			90
DC-13/DC-11	Ue ≤ 220 V DC (A)	250			90
Breaking capacity Ic					
AC-15/AC-11	Ue ≤ 400 V 50/60 Hz (A)	250			60
DC-13/DC-11	Ue ≤ 220 V DC (A)	2			0,95
Short circuit protection					
max. fuse gG (A)		16			10
Control circuit reliability					
		Ie min = 5 mA, Ue min = 17 V			
Electrical life span	Ops	10 ⁶			
Mechanical life span	Ops	15 x 10 ⁶			
Impedance /pole	mR	2,5			