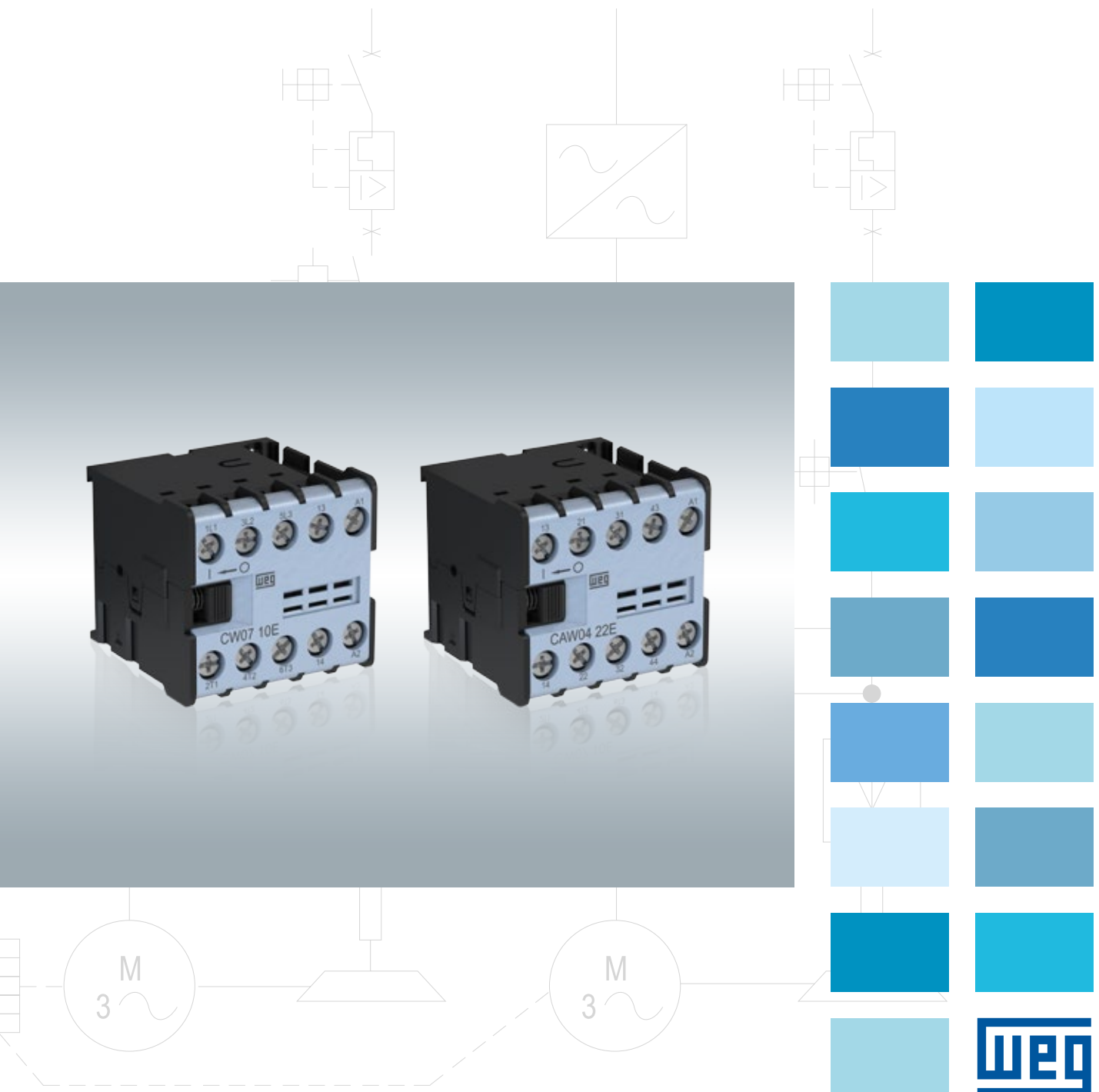


Automation

Miniature Contactors CW



1L1

3L2

5L3



CW07 10E

2T1

4T2

6T3

Miniature Contactors CW

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Miniature Contactors CW

Miniature contactors CW recommended when both space savings and demanding industrial performance are a must, are the perfect complement for WEG Control's family of contactors, for applications up to 3 kW / 4 HP @ 415 V. CW line can be used in a wide range of applications, from inductive loads such as motor control and solenoid valves, to resistive loads such as lightning and heating circuits. The power contactors CW07 can also handle single-phase applications, not being limited to three-phase systems.

Only 45 mm width and incredibly compact considering its power, CW07 miniature contactors prove itself the best choice when you're looking for a cost effective product for small HP/kW's.

Main Characteristics

- Rated current up to 7 A (AC-3) and up to 16 A (AC-1) for rated voltage up 415 V
- Easy installation by DIN rail 35 mm or screws
- Rated insulation voltage 415 V

Availables Versions

- Three-pole power contacts normally open with one auxiliary contact integrated (open or close)
- Four pole power contacts (4 normally open or 2 normally open and 2 normally close)
- Six power contacts normally open for reversing starter with mechanical interlock (CW107)
- Four auxiliaries contacts with many different versions (CAW04)



Certifications



SABS - South Africa

Miniature Contactors CW - Selection Table



Three-Pole CW07 - 7 A (AC-3)

Rated operational current I_e AC-3 ($U_e \leq 415$ V)	Conventional thermal current $I_{th} = I_e$ AC-1	Orientative maximum rated operational power of three-phase motors 50/60 Hz ¹⁾			Auxiliary contact integrated per contactor		Reference to complete with voltage code	AC coil
		220 V 230 V	380 V	400 V 415 V	 NO	 NC		
A	A	(kW / HP)	(kW / HP)	(kW / HP)			Screw terminal	Weight kg
7	16	1.5 / 2	3 / 4	3 / 4	1 0	0 1	CW07-10-30 ♦ CW07-01-30 ♦	0.13

Replace “♦” with the appropriate coil voltage code²⁾.

Coil voltage codes	D02	D07	D13	D23	D24	D25	D33	D34	D35
V ac - 50/60 Hz	24	48	110	220	230	240	380	400	415



Three-Pole for Reversing Starter with Mechanical Interlock CWI07 - 7 A (AC-3)

Rated operational current I_e AC-3 ($U_e \leq 415$ V)	Conventional thermal current $I_{th} = I_e$ AC-1	Orientative maximum rated operational power of three-phase motors 50/60 Hz ¹⁾			Auxiliary contact integrated per contactor		Reference to complete with voltage code	AC coil
		220 V 230 V	380 V	400 V 415 V	 NO	 NC		
A	A	(kW / HP)	(kW / HP)	(kW / HP)			Screw terminal	Weight kg
7	16	1.5 / 2	3 / 4	3 / 4	1 0	0 1	CWI07-10-30 ♦ CWI07-10-30 ♦	

Replace “♦” with the appropriate coil voltage code²⁾.

Coil voltage codes	Y05	Y73	Y16	Y79	Y25	Y27	Y29
V ac - 50/60 Hz	24	48	110	127	220	230	240

Coil voltage codes	Y92	Y97	YB2	Y31	Y34	YC5	Y44
V ac - 50/60 Hz	24	48	110	220	230	240	400

Note: 1) For 50/60 Hz three-phase, 4 poles WEG standard motors. These values are only for reference and may change on the number of poles and motor design;
2) Other voltages available.

Miniature Contactors CW - Selection Table



Control Relay CAW04

Rated current I _e AC-15 (A)		Rated current I _e DC-13 (A)		Auxiliary contact integrate per contactor		Reference to complete with voltage code	AC coil
≤240 V	380 / 415 V	24 V	48 V	3 4 NO	1 2 NC	Screw terminal	Weight
							kg
6	4	2.5	1.5	2	2	CAW04-22-00 ♦	0.13
				3	1	CAW04-31-00 ♦	
				4	0	CAW04-40-00 ♦	
				1	3	CAW04-13-00 ♦	



Four-Pole CW07 (4P or 2P/2R) - 16 A (AC-1)

Conventional thermal current I _{th} = I _e AC-1	Main contacts	Auxiliary contact integrate per contactor	Reference to complete with voltage code	AC coil
	3 4 NO	1 2 NC	Screw terminal	Weight
				kg
16	4	0	CW07-00-40 ♦	0.13
	2	2	CW07-00-22 ♦	

Replace “♦” with the appropriate coil voltage code¹⁾.

Coil voltage codes	D02	D07	D13	D23	D24	D25	D33	D34	D35
V ac - 50/60 Hz	24	48	110	220	230	240	380	400	415

Note: 1) Other voltages available.

Miniature Contactors CW - Selection Table



Three-Pole for Printed Circuit Boards CW07_I - 7 A (AC-3)

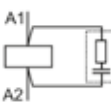
Rated operational current I_e AC-3 ($U_e \leq 415$ V)	Conventional thermal current $I_m = I_e$ AC-1	Orientative maximum rated operational power of three-phase motors 50/60 Hz ¹⁾			Auxiliary contact integrated per contactor		Reference code to complete with voltage code	AC Coil
		220 V 230 V	380 V	400 V 415 V	 NO	 NC		
A	A	(kW / HP)	(kW / HP)	(kW / HP)			Screw terminal	Weight kg
7	16	1.5 / 2	3 / 4	3 / 4	1 0	0 1	CW07-10-30 ♦ I CW07-01-30 ♦ I	0.15

Replace “♦” with the appropriate coil voltage code¹⁾.

Coil voltage codes	D02	D07	D13	D23	D24	D25	D33	D34	D35
V ac - 50/60 Hz	24	48	110	220	230	240	380	400	415

Accessories

Surge Suppressors Block

Illustrative picture	For use with	Diagram	Voltage	Reference	Weight kg
	CW07 CW107 CAW04		24...48 V 50/60 Hz	RC01 D53	0.014
			110...220 V 50/60 Hz	RC06 D62	
			380 V 50/60 Hz	RC10 D33	

Note: 1) For 50/60 Hz three-phase, 4 poles WEG standard motors. These values are only for reference and may change on the number of poles and motor design.
2) Other voltages available.

Technical Data

General Data

Reference code			CAW04		CW07	
Standards			IEC 60947-1, IEC 60947-4			
Rated insulation voltage U _i (pollution degree 3)	IEC 60947-4-1	(V)	415			
Rated impulse withstand voltage U _{imp}	IEC 60947-1	(V)	4			
Rated operational frequency		(Hz)	25...400			
Mechanical lifespan	AC coil CA	Ops x 10 ⁶	4			
Electrical lifespan	I _e AC-3	Ops x 10 ⁶	-		0.7	
Degree of protection	Main circuits		IP20			
	Control circuits and auxiliary contacts		IP20			
Mounting			Screw or DIN rail 35 mm (EN 50022)			
Coil terminals			2			
Vibration resistance	Contactor open		(g)		2	
	Contactor closed		(g)		4	
Mechanical shock resistance (½ sinusoid = 11ms)	Contactor open		(g)		6	
	Contactor closed		(g)		10	
Ambient temperature	Operation		-25 °C...+55 °C			
	Storage		-55 °C...+80 °C			
Normal values			Up to 3,000 m			
Altitude	90% I _e / 80% U _e		3,000 to 4,000 m			
	80% I _e / 75% U _e		4,000 to 5,000 m			

Control Circuit - Alternating Current (AC)

Reference code			CAW04	CW07
Rated insulation voltage U_i (pollution degree 3)	IEC 60947-4-1	(V)	415	
Coils rated voltage 50/60 Hz			12...380	
Coils rated voltage 50/60 Hz			(xU _e) 0.85...1.1	
Coil 50/60 Hz	Pick up	(xU _s)	0.5...0.8	
	Drop out	(xU _s)	0.2...0.6	
Average consumption			1.0 x U _e coil cold state	
Coil 50/60 Hz	Magnetic circuit closed	(VA)	3.3...5.5	
	Power factor	(cos φ)	0.42	
	Power dissipation per pole	(W)	2.3	
	Power dissipation per pole	(VA)	19.3	
	Power factor	(cos φ)	0.86	
Average time	Closing NO contacts	(ms)	9...30	
	Opening NO contacts	(ms)	5...25	



Technical Data

Power Circuit

Reference code			CW07
Rated operational current I _e	AC-3 (U _e ≤415 V)	(A)	7
	AC-4 (U _e ≤415 V)	(A)	-
	AC-1 (θ ≤55 °C, U _e ≤415 V)	(A)	16
Rated operational voltage U _e	IEC 60947-4-1	(V)	415
Rated thermal current I _m	θ ≤55 °C	(A)	16
Protection against short-circuits with fuses (gL/gG)	Coordination type 1	(A)	20
	Coordination type 2	(A)	16
Utilization category AC-3			
Rated operational current I _e (θ ≤55 °C)	U _e ≤415 V	(A)	7
Utilization category ¹⁾	220 / 230 V	(kW)	1.5
		(HP)	2
	380 / V	(kW)	3
		(HP)	4
	400 / 415 V	(kW)	3
		(HP)	4
Utilization category AC-1 (3P o 4P)			
Rated thermal current I _m	θ ≤55 °C	(A)	16
Rated operational current (up to 415 V)	θ ≤40 °C	(A)	16
	θ ≤55 °C	(A)	16
Maximum operational power θ ≤55 °C 3-phase resistors	220 / 230 V	(kW)	6
	380 / 400 V	(kW)	10
	415 V	(kW)	11
Current values for connection of	2 poles in parallel		I _e x 1.7
	3 poles in parallel		I _e x 2.4
	4 poles in parallel		I _e x 3.2
Percentage of the max. operational current at	600 ops./h	(%)	100
	1,200 ops./h	(%)	60

Technical Data

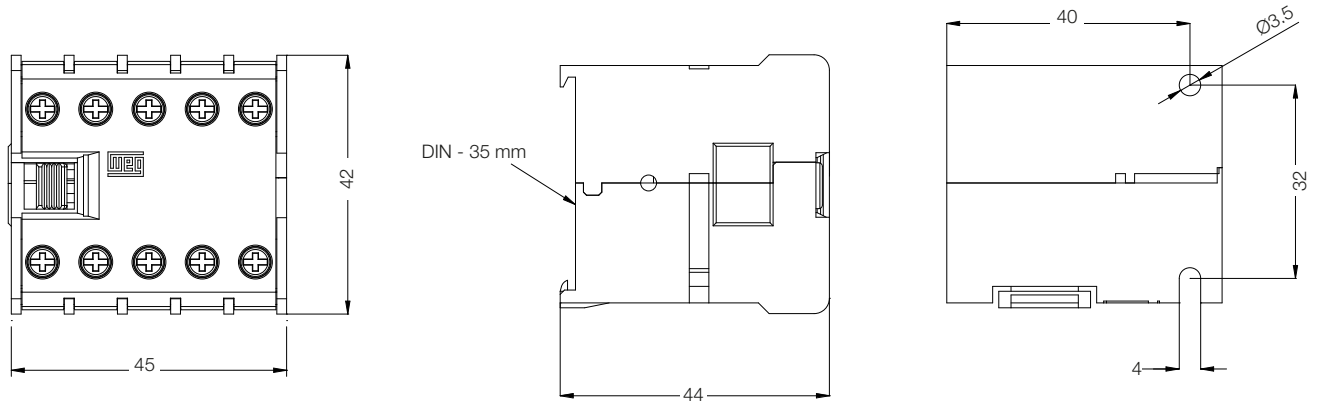
Built-In Auxiliary Contacts

Reference			CAW04	CW07
Standards			IEC 60947-5-1, IEC 60947-4-1	
Rated insulation voltage U _i (pollution degree 3)	IEC	(V)	415	
Rated operational voltage U _e	IEC	(V)	415	
Rated thermal current I _m	θ ≤55 °C	(A)	6	
Rated operational current I _e				
AC-15 (IEC 60947-5-1)	U _e ≤240 V	(A)	6	
	380-400 V	(A)	4	
	415 V	(A)	4	
DC-13 (IEC 60947-5-1)	24 V	(A)	2.5	
	48 V	(A)	1.5	
	220 V	(A)	0.36	
Making capacity (rms)	U _e ≤400 V 50/60 Hz - AC-15	(A)	10 x I _e (AC-15)	
Breaking capacity (rms)	U _e ≤400 V 50/60 Hz - AC-15	(A)	10 x I _e (AC-15)	
Max. fuse class gL-gG without welding (short-circuit protection) gL/gG			6	
Control circuit reliability		(V / mA)	17 / 5	
Mechanical lifespan		(Ops x 10 ⁶)	1	
Electrical lifespan		(Ops x 10 ⁶)	10	

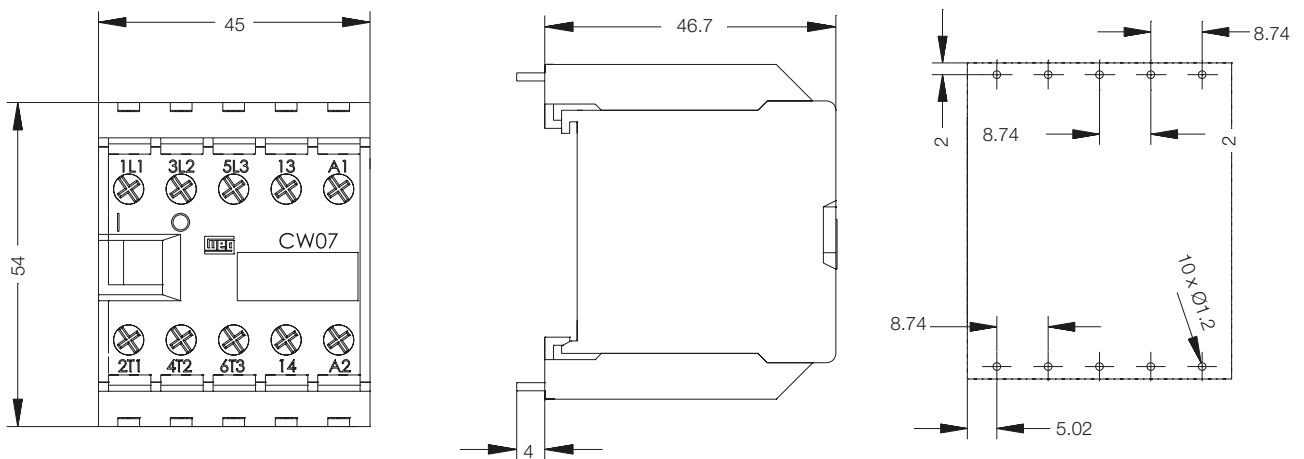


Dimensions (mm)

CW07 and CAW04

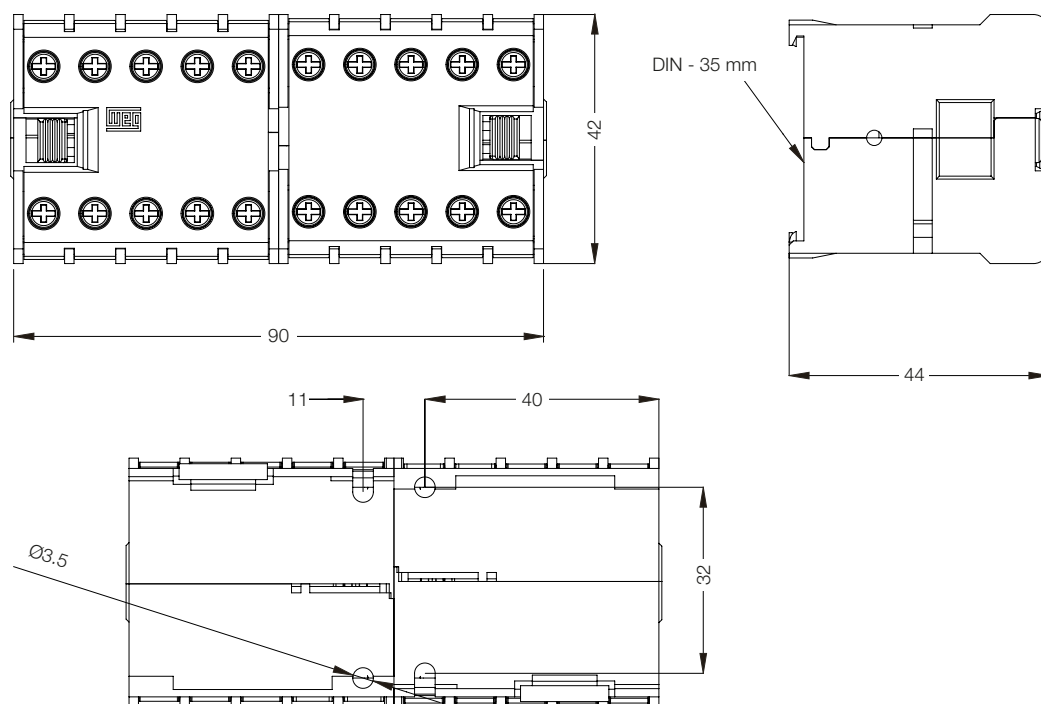


CW07_I and CAW04_I - Print Circuit Board

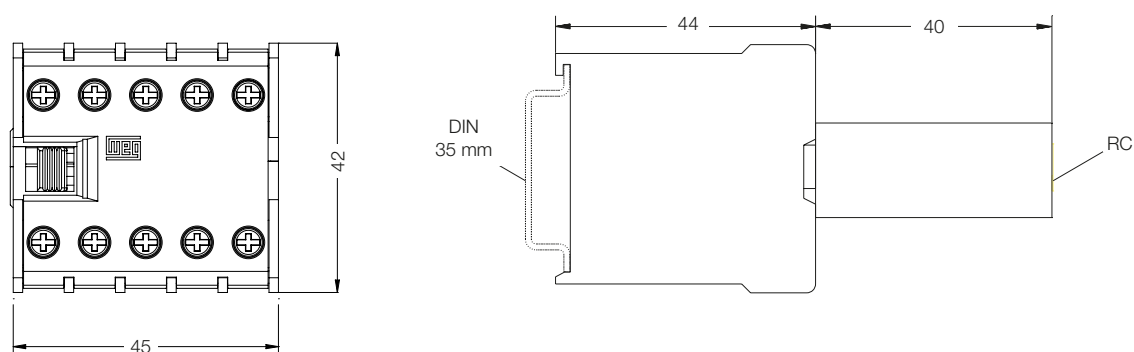


Dimensions (mm)

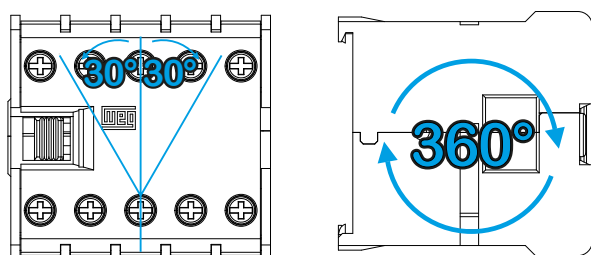
CW107



CW07 and CAW04 + Surge Suppressor RC



Mounting Position



[illegible]



Global presence is essential, as much as understanding your needs.

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With more than 30,000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

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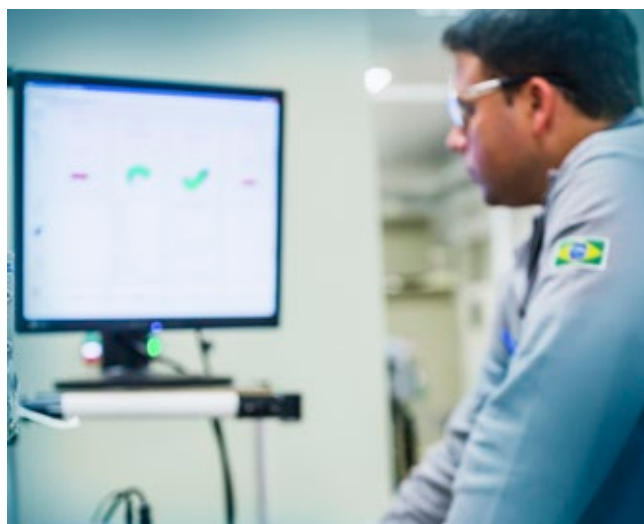
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