



# DLW - Enclosed Direct-On-Line Starter


## Three-phase starters

- Composition: contactor and thermal overload relay
- Degree of protection: IP65 or IP66<sup>3)</sup>
- Operational voltage up to 690 V and wide control voltage available
- Enclosure with UV protection and high mechanical shock resistance
- Short circuit protection has to be ensured by a separate short circuit protection facility



Orientative motor rated power 50/60 Hz <sup>1)</sup>					Setting range of overload relay  Ir (A)	Max. rated operational (A)	Reference to complete with control voltage code	Contactor	Thermal overload relay	Weight (kg)
230 V 240 V kW/hp	380 V kW/hp	400V 415V kW/hp	440 V kW/hp	690 V kW/hp						

Size 05					Setting range of overload relay  Ir (A)	Max. rated operational (A)	Reference to complete with control voltage code	Contactor	Thermal overload relay	Weight (kg)
230 V 240 V kW/hp	380 V kW/hp	400V 415V kW/hp	440 V kW/hp	690 V kW/hp						
-	-	-	0.12	0.18/0.26	0.28...0.4	0.4	DLW-B9■P66-R54	CWB9	RW27-2D3-D004	0.985
-	0.12/0.16	0.18/0.25	0.18/0.25	0.25/0.33	0.4...0.63	0.63	DLW-B9■P66-R55	CWB9	RW27-2D3-C063	
0.12/0.16	0.18/0.25	0.25/0.33	0.25/0.33	0.37/0.5	0.56...0.8	0.8	DLW-B9■P66-R56	CWB9	RW27-2D3-D008	
0.18/0.25	0.25/0.33 0.37/0.5	0.37/0.5	0.37/0.5	0.55/0.75 0.75/1	0.8...1.2	1.2	DLW-B9■P66-R57	CWB9	RW27-2D3-D012	
0.25/0.33	0.55/0.75	0.55/0.75 0.75/1	0.55/0.75 0.75/1	1.1/1.5	1.2...1.8	1.8	DLW-B9■P66-R58	CWB9	RW27-2D3-D018	
0.37/0.5 0.55/0.75	0.75/1 1.1/1.5	1.1/1.5	1.1/1.5	1.5/2 2.2/3	1.8...2.8	2.8	DLW-B9■P66-R59	CWB9	RW27-2D3-D028	
0.75/1	1.5/2	1.5/2.0	1.5/2 2.2/3	3/4	2.8...4.0	4.0	DLW-B9■P66-R60	CWB9	RW27-2D3-U004	
1.1/1.5	2.2/3	2.2/3.0	3/4	3.7/5	4.0...6.3	6.3	DLW-B9■P66-R61	CWB9	RW27-2D3-D063	
1.5/2	3/4	3/4	4/5.5	5.5/7.5	5.6...8.0	8.0	DLW-B9■P66-R62	CWB9	RW27-2D3-U008	
2.2/3	4/5.5	4/5.5	-	-	7.0...10	9.0	DLW-B9■P66-R63	CWB9	RW27-2D3-U010	
3/4	5.5/7.5	5.5/7.5	5.5/7.5	7.5/10	8.0...12.5	12	DLW-B12■P66-R64	CWB12	RW27-2D3-D125	
4/5.5	-	7.5/10	7.5/10	9.2/12.5 11/15	10...15	15	DLW-B18■P66-R65	CWB18	RW27-2D3-U015	
-	7.5/10	-	9.2/12.5	-	11...17	17	DLW-B18■P66-R66	CWB18	RW27-2D3-U017	
-	-	-	-	-	15...23	18	DLW-B18■P66-R67	CWB18	RW27-2D3-U023	
5.5/7.5	9.2/12.5 11/15	11/15	11/15	-	15...23	23	DLW-B25■P66-R67	CWB25	RW27-2D3-U023	
-	-	-	-	-	22...32	25	DLW-B25■P66-R68	CWB25	RW27-2D3-U032	
7.5/10	15/20	15/20	15/20	-	22...32	32	DLW-B32■P66-R68	CWB32	RW27-2D3-U032	
-	-	-	-	-	25...40	32	DLW-B32■P66-R69	CWB32	RW27-2D3-U040	
9.2/12.5 11/15	18.5/25	18.5/25	18.5/25 22/30	-	25...40	38	DLW-B38■P66-R69	CWB38	RW27-2D3-U040	

Size 08					Setting range of overload relay  Ir (A)	Max. rated operational (A)	Reference to complete with control voltage code	Contactor	Thermal overload relay	Weight (kg)
230 V 240 V kW/hp	380 V kW/hp	400V 415V kW/hp	440 V kW/hp	690 V kW/hp						
9.2/12.5 11/15	18.5/25	18.5/25	18.5/25 22/30	30/40	25...40	40	DLW-50■P65-R36	CWM50	RW67-2D3-U040	3.100
-	22/30	22/30	-	-	40...57	50	DLW-50■P65-R39	CWM50	RW67-2D3-U057	
15/20	-	30/40	30/40	37/50	40...57	57	DLW-65■P65-R39	CWM65	RW67-2D3-U057	
18.5/25	30/40	-	37/50	-	50...63	63	DLW-65■P65-R40	CWM65	RW67-2D3-U063	
-	-	37/50	-	-	57...70	70	DLW-80■P65-R41	CWM80	RW67-2D3-U070	
22/30	37/50	-	45/60	-	63...80	80	DLW-80■P65-R42	CWM80	RW67-2D3-U080	

Control voltage (add suffix code)

50/60 Hz <sup>2)</sup>	220 V	230 V	240 V	400 V	415 V	500 V
■ Codes	D23	D24	D25	D34	D35	D40



Degree of protection: 65 (IP65) or 66 (IP66)<sup>3)</sup>

Versions (add suffix code)

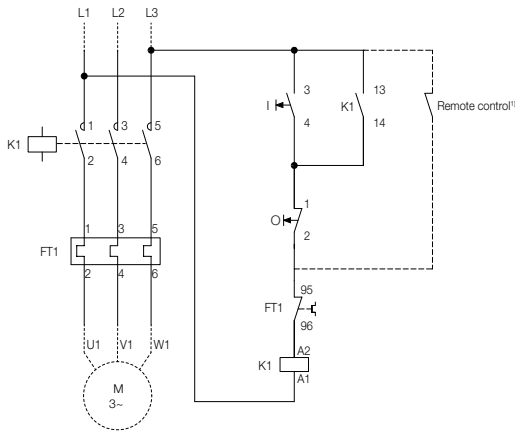
Type of operation	Code
Start - Stop/Reset operation (standard)	<b>P</b>
Remote control (without buttons)	<b>I</b>
Stop/Reset operation (without ON button)	<b>D</b>
Hand/OFF/Auto operation (Hand = local control / Auto = remote control) + Start + Stop/Reset	<b>B</b>

Notes: 1) Some motors characteristics may vary according to each manufacturer;  
 2) Other voltages available;  
 3) IP66 only for size 05;  
 4) For enclosed starters with others configurations only under request, consult your WEG local distributor.

# Wiring Diagram

## DLW (Three-Phase) Connected in Three-Phase Supply

Sizes: 02, 04 and 08



Size: 05

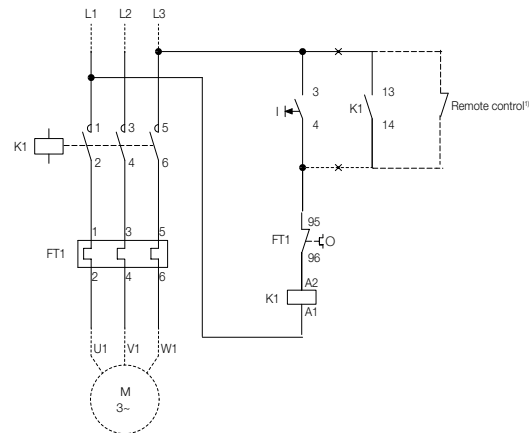
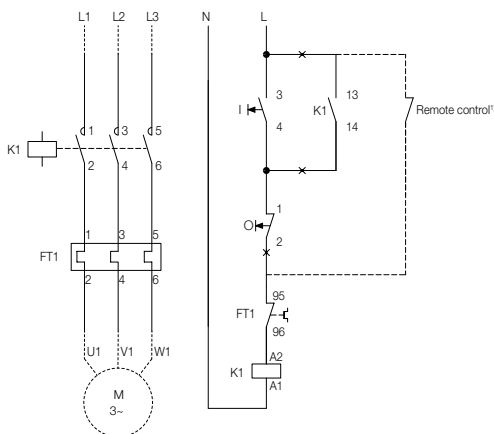


Figure 1 (phase to phase coil supply)

Sizes: 02, 04 and 08



Size: 05

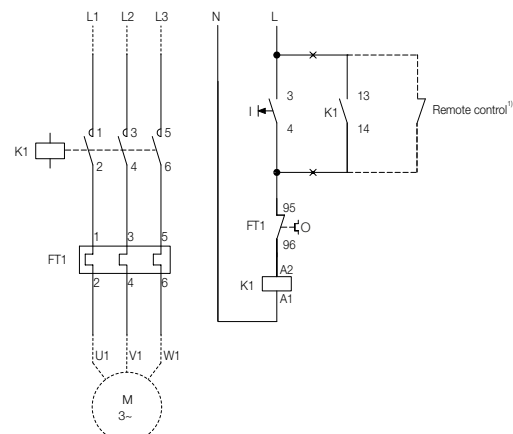


Figure 2 (control circuit connected through a separate coil supply)

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- Notes: 1) When using remote control, disconnect the circuit at the points marked with the "x" in figures 1 and 2 and connect the external devices (thermostat, pushbutton, etc.), as indicated with broken lines.
- 2) When using 230 V, 400 V, 500 V, on the reference code, starters will be factory-connected, as per wiring diagrams of figure 1, that is, with phase to phase coil supply.
- 3) When using 24 V, 48 V, 110 V, etc. on the reference code, starters will be factory-connected, as per wiring diagrams of figure 2, that is, with control circuit to be connected through a separate coil supply.

# Wiring Diagram

## DLWM (Single-Phase) Connected in Single-Phase Supply

Sizes: 02, 04 and 08

Size: 05

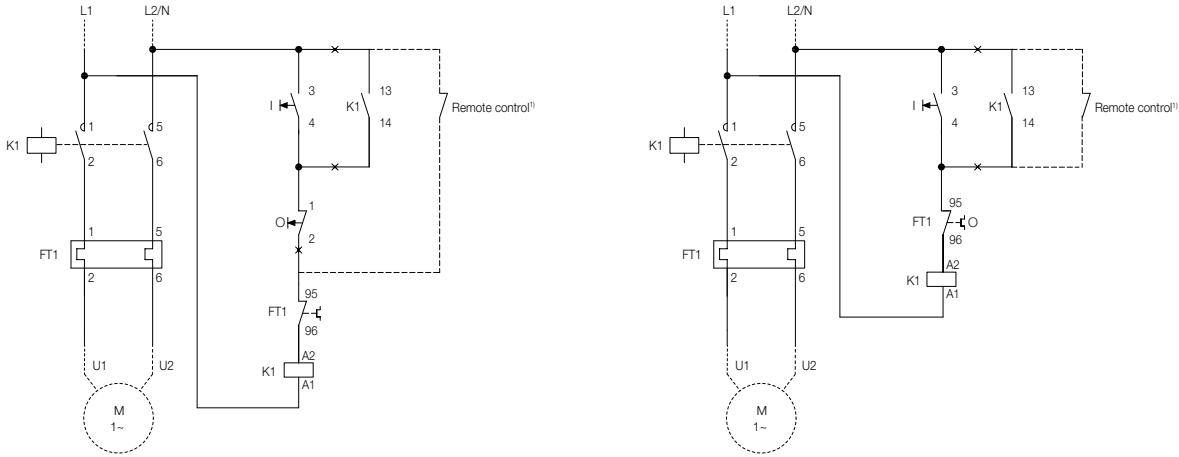


Figure 1 (phase to phase coil supply)

Sizes: 02, 04 and 08

Size: 05

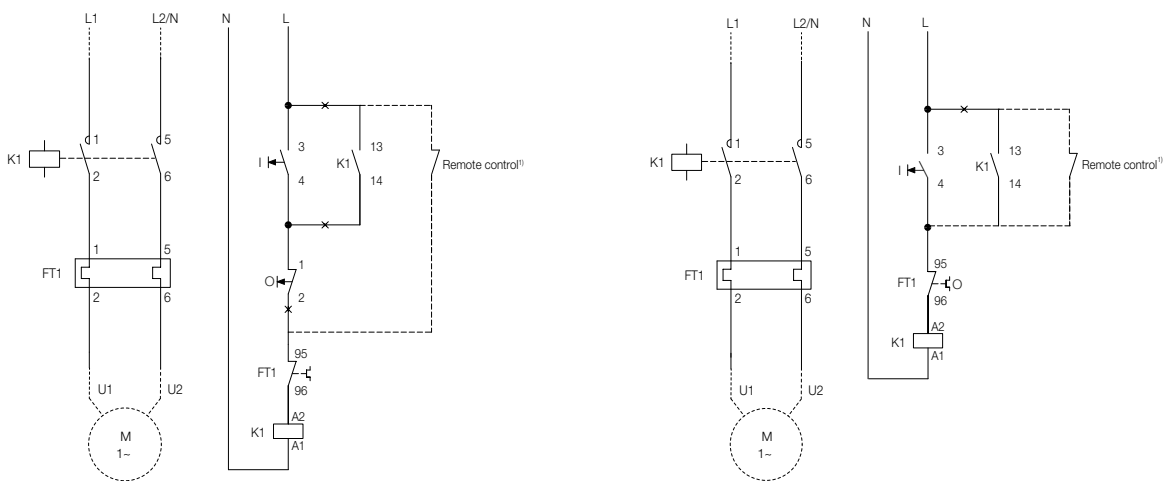
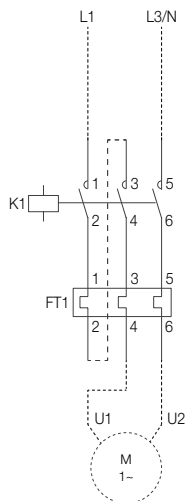


Figure 2 (control circuit connected through a separate coil supply)

## Mandatory Connection to DLW (Three-Phase) Connected in Single-Phase Supply

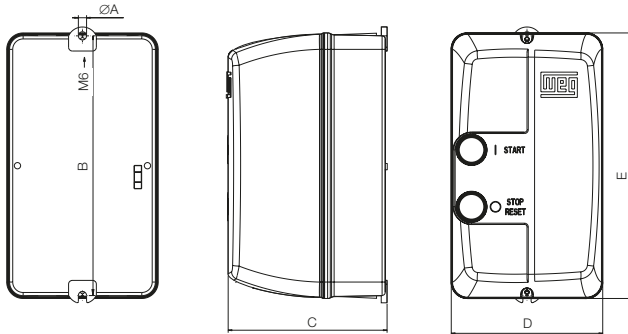


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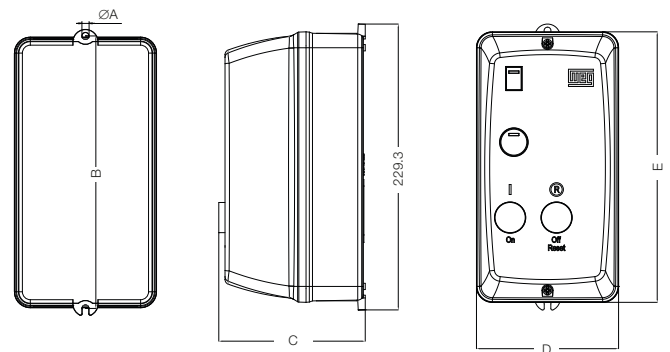
- Notes: 1) When using remote control, disconnect the circuit at the points marked with the "x" in figures 1 and 2 and connect the external devices (thermostat, pushbutton, etc.), as indicated with broken lines.  
 2) When using 230 V, 400 V, 500 V, on the reference code, starters will be factory-connected, as per wiring diagrams of figure 1, that is, with phase to phase coil supply.  
 3) When using 24 V, 48 V, 110 V, etc. on the reference code, starters will be factory-connected, as per wiring diagrams of figure 2, that is, with control circuit to be connected through a separate coil supply.

## Dimensions (mm)

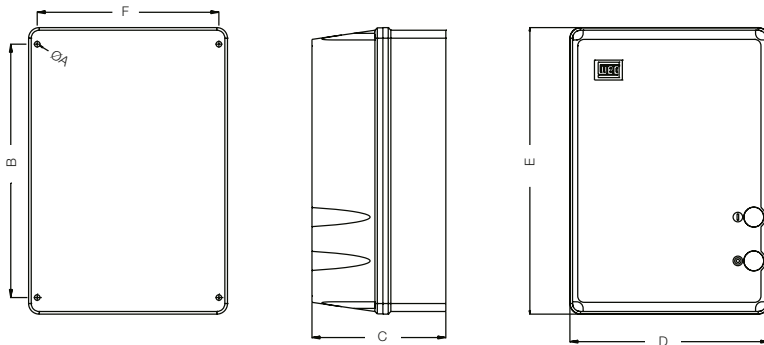
### Sizes 02 and 04



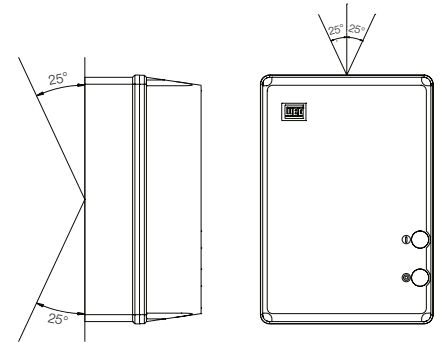
### Size 05



### Frame 08



### Mounting Installation



### Enclosure

Size	02	04	05	08
ØA	4.5	4.5	5.5	5
B	150	180	219	245
C	98	111	117.5	143
D	90	105	114	180
E	155	185	217	280
F	-	-	-	166

### Cable Knock-Outs

Size	02	04	05	08
Top	2xØPG16 or 2xØ20 mm		2xØPG13.5 or 2xØ20/25 mm	2xØPG21/29 or 2xØ25/32 mm
Button				
Back	2xØPG9 or 2xØ16 mm		2xØPG9 or 2xØ16 mm	-

## Technical Data

Standard	IEC/EN 60947
Operating temperature	-20 °C...55 °C
Storage temperature	-50 °C...80 °C
Degree of protection	IP65/66 <sup>2)</sup>
Mechanical lifespan (operation)	1 x 10 <sup>6</sup>
Electrical lifespan (operation)	1 x 10 <sup>5</sup>
Maximum number of operation per hour	15 <sup>1)</sup>
Certifications	CE, ANCE, EAC, ICONTEC, IRAM
Thermoplastic enclosed material (cover and base)	V0 (fire retardant)
UV protection	Yes (inside or outside use)

Notes: 1) Limited by the thermal overload relay;  
2) Only for size 05.

