

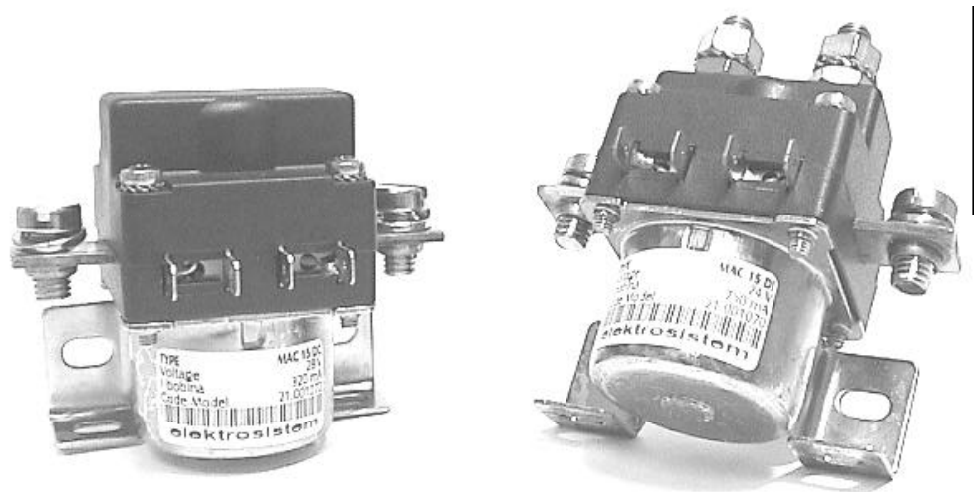


elektrosistem



UNIPOLAR CONTACTORS

“MAC-10”
“MAC-15”



The “MAC” series monoblock contactors are characterized by a strong interrupting power (insulation) and by small dimensions.

They are used for DC loads with operation voltages up to 96 VDC (DC1 duty) and are available with 1 (type D) or 2 (type R) contacts (1NO+1NC).

They are generally used for starting and drive of electric lift truck DC motors, remote control of battery supplied power circuits, drive of starting motors for combustion engines, power supply of board watercraft instruments, etc...

The squared assembly tongue enables every kind of assembly.

The contactors are provided with washers and screws for cables connections and with magnetic blowouts for voltages ≥ 48 VDC.

Coil and contacts can be easily inspected for maintenance and replacement.

The “MAC” series contactors are protected against dust and water sprays, can work in a wide temperature range (from -30° to $+60^{\circ}$ C) and have a maximum closing lag of 20 ms and an opening lag of 9 ms (that becomes 20 ms

with extra current peak extinguisher that is a resistance of 56 Ohm + diode).

USE:

For a correct use, a vertical assembly with the black head up for “D” type and with the black head down for “R” type is advised. Contacts must be connected according to fig. 1.

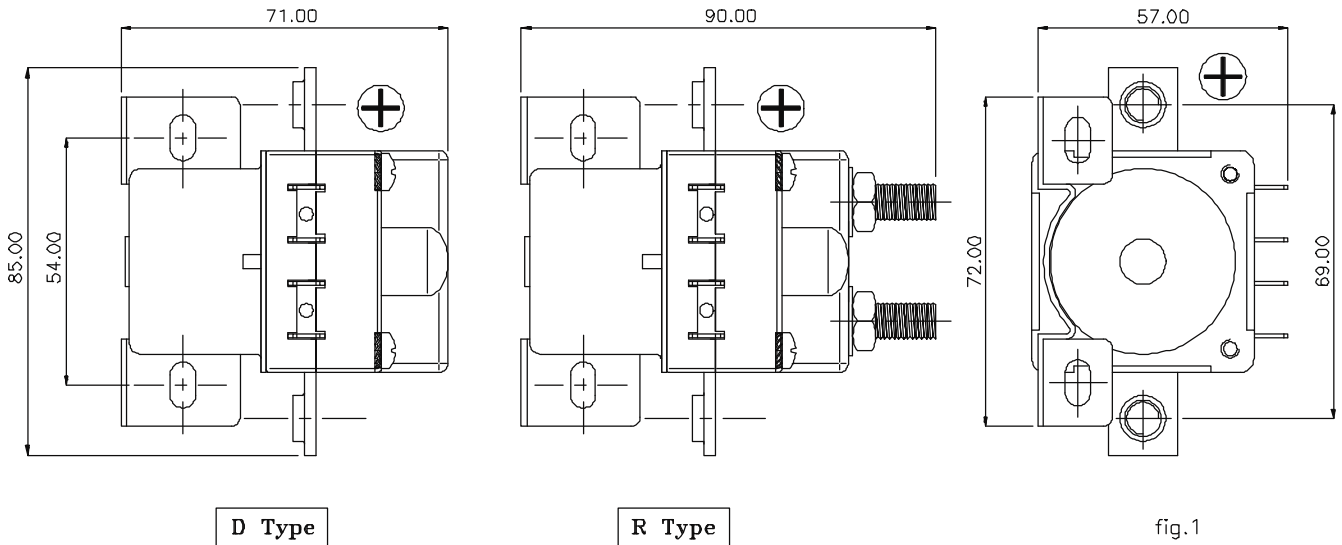
On request contactors having a different polarity than standard ones can be supplied.

For very inductive loads (DC2-DC4 duty), it is necessary to add a free-wheel diode (fig. 3).

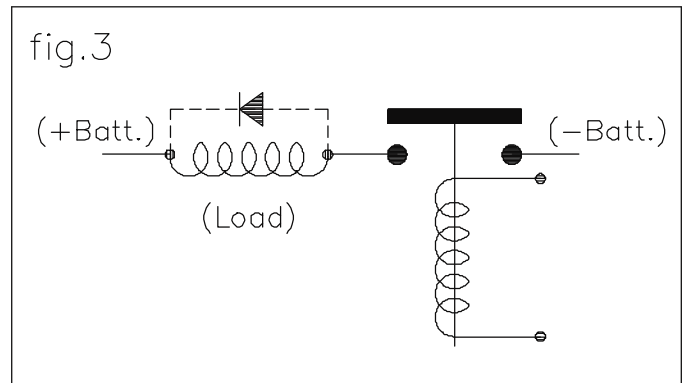
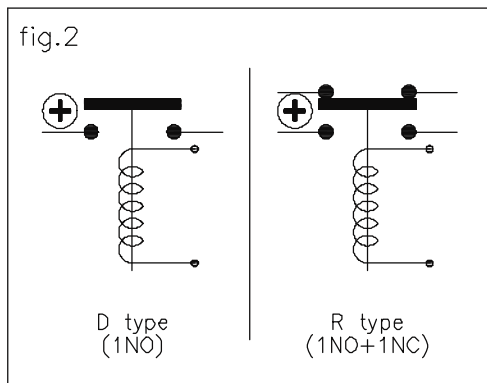
Technical features might be modified without notice.



MECHANICAL CLEARANCES



WIRING DIAGRAM



CONTACTS AND COILS FEATURES

DC1 DUTY (Resistive load)

MAC	V	"N.O." CONTACT		"N.C." CONTACT	
		CONT.	SPUNTO	CONT.	SPUNTO
10-D	24/80	100	300	—	—
15-D	24/80	150	450	—	—
15-R	24/80	150	450	75	250

CONT.=MAX. CONTINUOUS CURRENT SPUNTO=STARTING CURRENT

Load on contacts can be increased up to 200% with a consequent shorter life of contactors.

- DC1: No or slightly inductive loads (spiral resistor)
- DC2: Shunt motor starting and stopping
- DC4: Series motor starting and stopping

ON REQUEST STANDARD

V	INTERMITTENT DUTY		CONTINUOUS DUTY	
	RES.20°C	20°C	RES.20°C	20°C
12	7,4	COIL POWER CONSUMPTION 19,5W AT 20°C OPERATIVE VOLTAGE AT 25°C FROM 60% TO 100% OF "VB"	13	COIL POWER CONSUMPTION 11W AT 20°C OPERATIVE VOLTAGE AT 25°C FROM 80% TO 110% OF "VB"
24	29,5		52,5	
36	66,5		118	
48	118		210	
60	185		327	
72	266		471	
80	328		582	
96	473		838	
108	582		1060	
120	838		1309	

For intermittent duty, work cycles of 10" (ON) and 60" (OFF) or 1' (ON) and 6' (OFF) are advised.