

D.C. Motor Reversers TEAM



D.C. Motor Reversers type TEAM

Main Features

The range of TEAM monobloc motor reversers has been designed to be particularly suitable for traction and handling in direct current and especially for: lift trucks, sweepers and industrial cleaning machines, services on board ships as well as vehicles for road and rail transport.

TEAM motor reversers TE106C / TE156 C (two single pole contactors with 1 NO 1 NC contacts) and TE106 / TE156 (two single pole contactors with 1 NO contacts) are provided with internal electric connections.

The result is a compact and completely protected product.

Coils

D.c. coils are provided with terminals with 6 mm connections. Standard duty is intermittent (50%). Maximum working time is 15 mins (temporary duty).

Normalized voltage is: 12-24 V

Main Contacts

Motor reversers have silver alloy double breaking contacts, resistant to arc, suitable for heavy duty.

NC contacts are not suitable for switching on and off the current.

Integral Protection

The cover is completely protected from oil, water and dust, with IP65 protection degree.

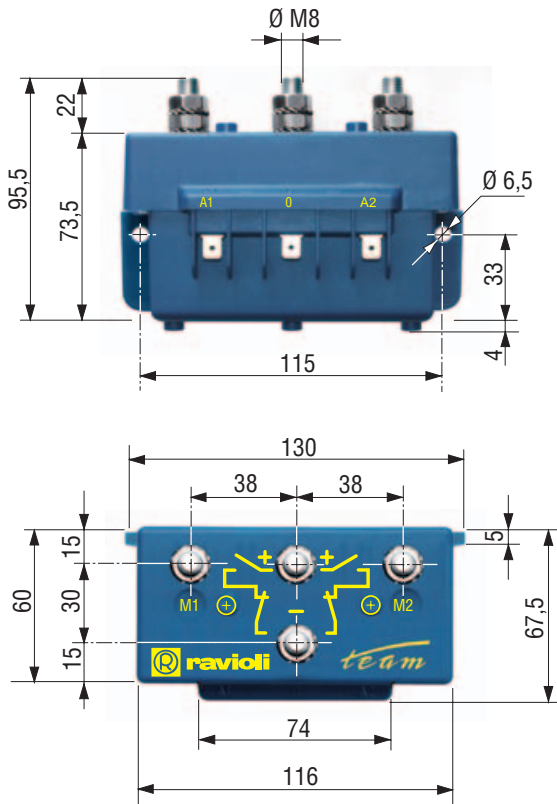
Performances

Motor reverser		TE106C	TE156C	TE106	TE156
Nominal operating current at 50% intermittent, 300 op/h	I_e NO	120A	150A	120A	150A
Thermal current rating	I_{th} NO	80A	100A	80A	100A
Nominal voltage	U_e	24V	24V	24V	24V
Breaking capacity with 15 ms time constant		360A	450A	540A	575A
Category of usage		DC5	DC5	DC5	DC5
Working voltage limits		0,7-1,1Vn	0,7-1,1Vn	0,7-1,1Vn	0,7-1,1Vn
Coil power dissipation		32W	32W	32W	32W
Protection degree		IP65	IP65	IP65	IP65
Mechanical life	op. n.	3x10 ⁶	3x10 ⁶	3x10 ⁶	3x10 ⁶
Main contacts		2x1NO 1NC	2x1NO 1NC	2x1NO	2x1NO

Types and Codes

Types			Codes
TE106	2x1NO	3 poles 50 % coil	ETE106
TE106C	2x1NO 1NC	4 poles 50 % coil	ETE106C
TE156	2x1NO	3 poles 50 % coil	ETE156
TE156C	2x1NO 1NC	4 poles 50 % coil	ETE156C

Dimensions

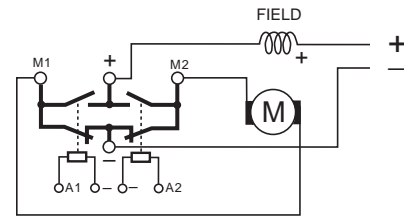


Diagrams of functioning

D.C. shunt motor reversing

E TE 106 C

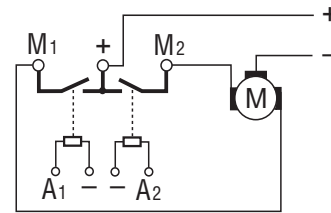
E TE 156 C




Permanent magnet motor reversing

E TE 106

E TE 156



The lines  represent the links the motor reverser provides inside.

Installation and wiring instructions

TEAM motor reversers must be installed by a qualified staff, according to current safety laws. Electrical current must be switched off before wiring.

Use suitable cables according to the usage current in order to have a better loss of heat.

Assure that power cables terminals are suitably locked with nuts with max clamps torque of 4 Nm.

Assembling can be carried out through screws M6.

Recommended working position : either horizontal or vertical axis with poles set upwards.

Operating temperature $-25^{\circ}\text{C}+40^{\circ}\text{C}$

RAVIOLI declines all responsibility for damages deriving from incorrect installation or improper use of the product.

For Your own Safety

TEAM range complies with the current safety rules, and in particular:

- 89/392 EEC Machine Directive
- 73/23 EEC Low Voltage Directive
- 2004/108/CE EMC Directive
- 2002/95/CE RoHS
- EN 1175-1 Safety of industrial trucks
- EN 60947-4-1 Low voltage switch gear
- EN 60529 Specification for IP code

Guaranteed Quality Product

The range of TEAM is guaranteed by our EC Certificate of Conformity, available on request, in which it is declared that such product was created by RAVIOLI in accordance to defined and recognised Safety Regulations, and in compliance with the Quality standards stated in our ISO 9001:2000 Quality System Certificate.