

Généralités

PM current relay under BB housing mounted on 80x5 busbar for R-FN-03 function.
 This relay is designed to detect a braking current upstream of the traction inverters, during emergency braking. It is placed between the traction inverters and the brake chopper.
 The current flowing through it is bidirectional. The relay can drop out whatever the direction of the current; however, the pick up and drop out thresholds are only defined for one direction of current, that which corresponds to braking.
 In traction, this current is continuous. In braking, it is a chopped current, or continuous.

Generality

Reference standard

Electrical Characteristics

Normes références

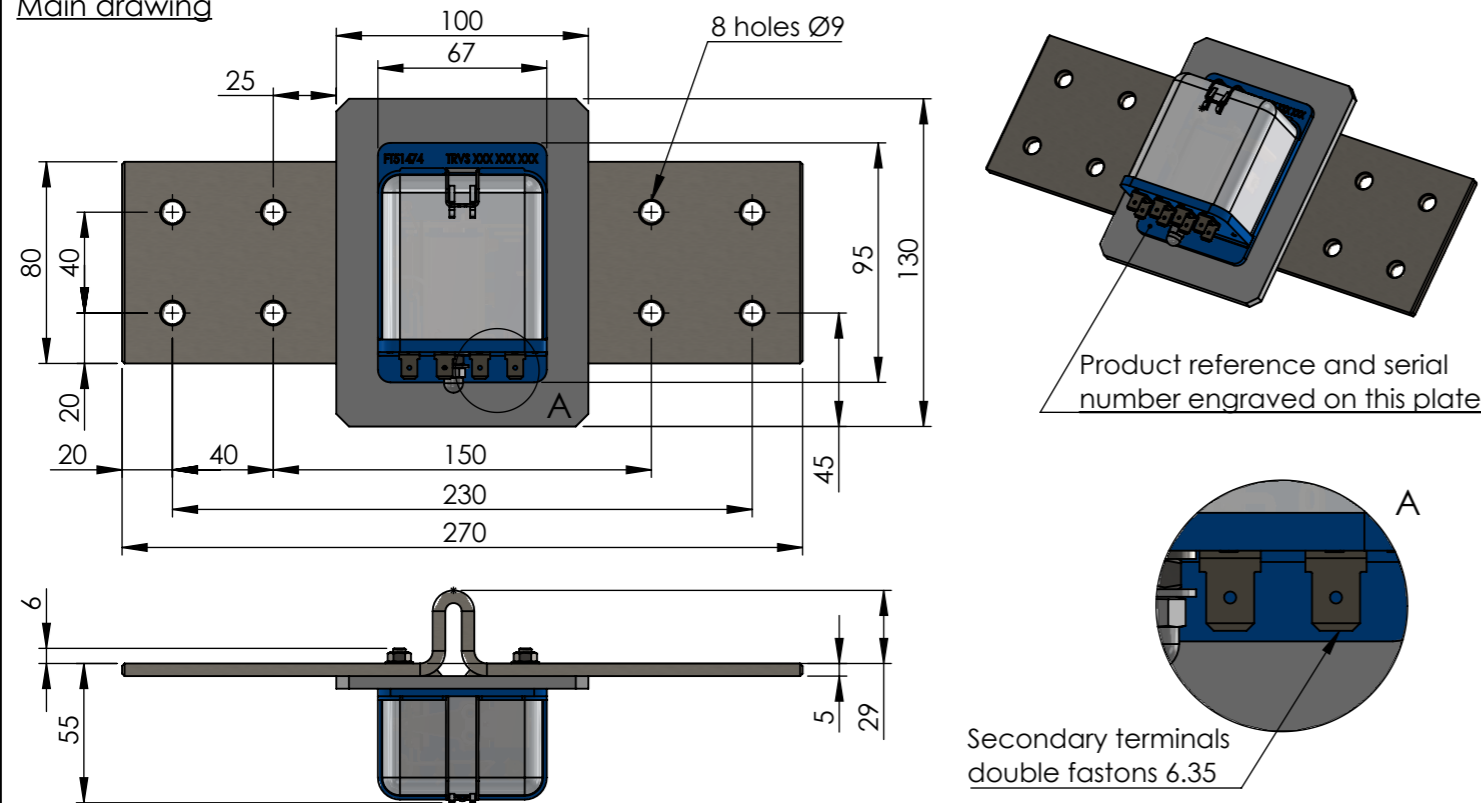
Entitled	Standard
Electrical equipment :	NF EN 60077/ IEC 60077
Traction network supply :	NF EN 50163
Shock and vibration :	NF EN 61373
Salt mist :	96h/ NF EN 60068-2-11
Fire and smoke :	NF F 16-101(2)Requirement 0

Caractéristiques électriques

Circuit primaire/ Primary circuit

Nominal current/ Voltage : N.A.
 Max. perm. Current/ Voltage : 1300 Adc
 The form of the current depends on the value of the voltage at the terminals of the capacitors, 6µF of the inverters, this voltage being able to vary between 1930 and 1150V.

Main drawing



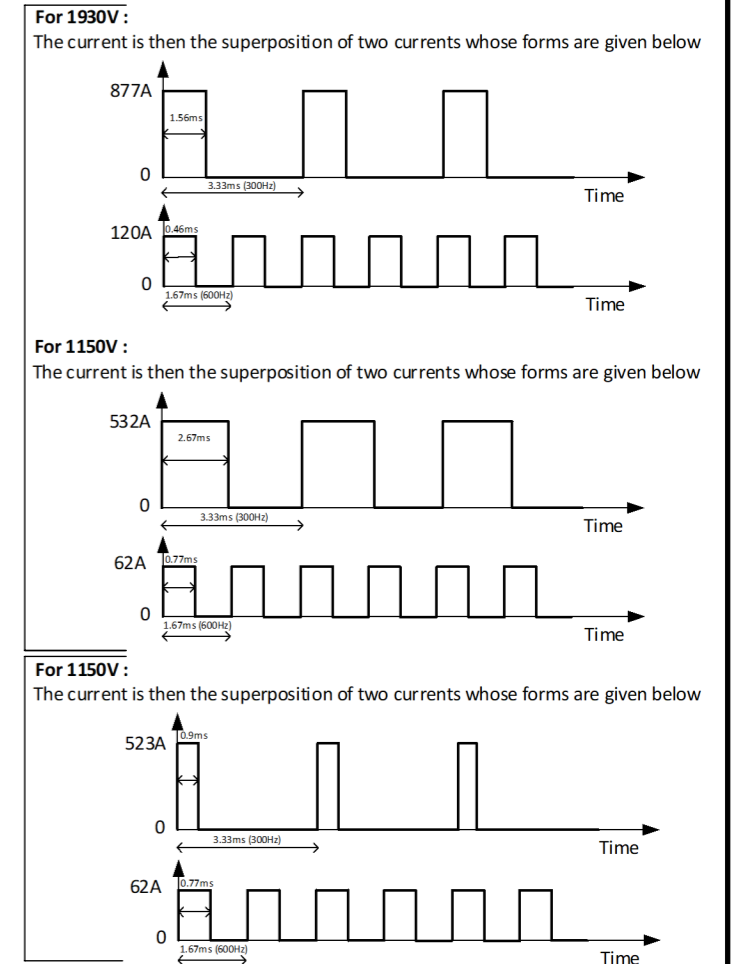
Main Characteristics

Caractéristiques principales

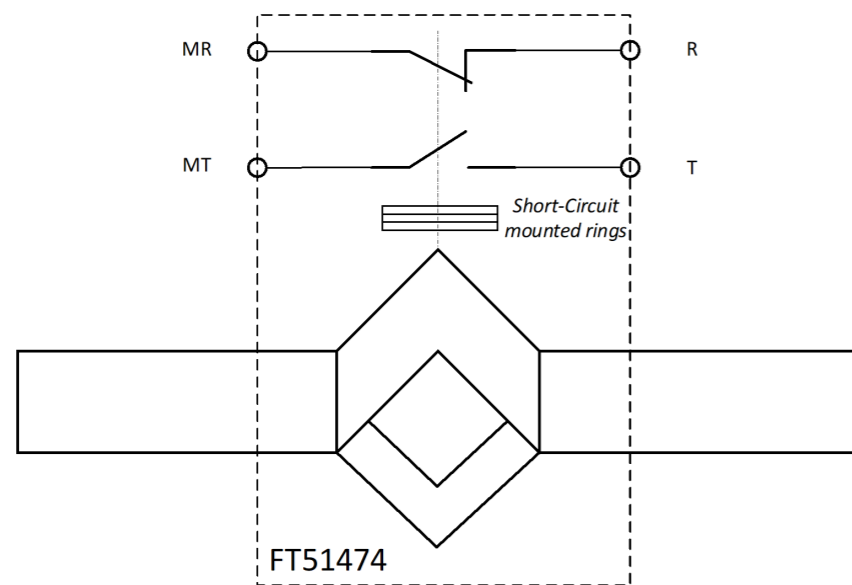
Main	
Type of Relay :	Current relay
Type of current :	AC/DC
Type of Housing :	BB
Auxiliary voltage :	No
Weight :	1.4 Kgs
Contacts	
Number of Contacts :	1 N/O - 1 N/C
Contacts metalurgy :	Ag/ Pd
Contacts rating :	90 VDC - 0.3 A - L/R=30 ms
Electrical lifetime :	> 10 ⁶ Operations
Contact resistance :	< 20 mOhms
Environment	
Operating temperature :	-25°C...+70°C
Storing temperature :	-40°C...+85°C
Mounting position :	Any attitude

Average Pick up Value : 450A ±30A

Average Drop out Value : 200A ±20

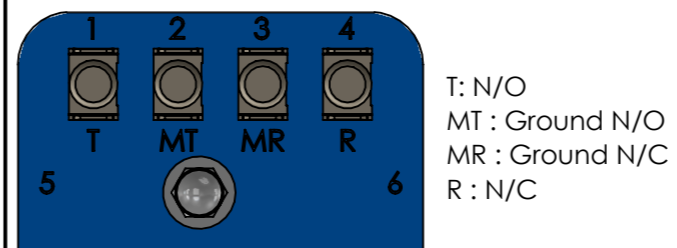


Electrical drawing



Connections & marking

Connections & gravage



Further information

Informations complémentaires

This relay works with PWM current; Pick up and drop out value are mean values.

Dielectric strength checks

Essais diélectriques

Kv - 50 Hz

10 Kv Between primary and secondary
 1.5 Kv Between each contact

Additional information

Caractéristiques Supplémentaires

Fonction(s) client : R-FN-03 N°(s) spécification : TRVS 346 630 000 B Symbole/ Article : N.A.

NOM	DATE	Entreprise/ Company :	DÉSIGNATION DU PRODUIT/ PRODUCT DESIGNATION:
AUTEUR. FT Samuel Hadiouche	16/07/2019	TECHNO-ELEC SAS Adresse/ Address : ZI de la castine, rue des sapins 54730 - GORCY - FRANCE	Current detection relay for brakes 255 A 1300 A
MARQUE DÉPOSÉE/ BRAND NAME : TECHNO-ELEC - SERVO CONTACT		RÉFÉRENCE FICHE TECHNIQUE/ DATASHEET REFERENCE: FT51474	
E		Echelle: 1:2	
REVISION		FEUILLE 1 SUR 1	

E	Modification N°00583	01/09/1993	
REVISION	DESCRIPTION	DATE	APPROVED BY



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