

T.EL.FER



TF-RP1X

DC PROTECTION RELAY FAMILY

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VAT registration of ALESSANDRIA n. 02275860068 – REA Number: AL – 241383 Corporate capital € 60.641,00 i.v.
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**THE QUALITY SYSTEM OF T.EL.FER. SRL HAS BEEN FOUND TO COMPLY WITH THE REQUIREMENTS OF UNI EN ISO 9001:2008
CERTIFICATE NUMBER 50 100 11979**

DOC: **CO0916 / TF-RP1X – EDS / 001**

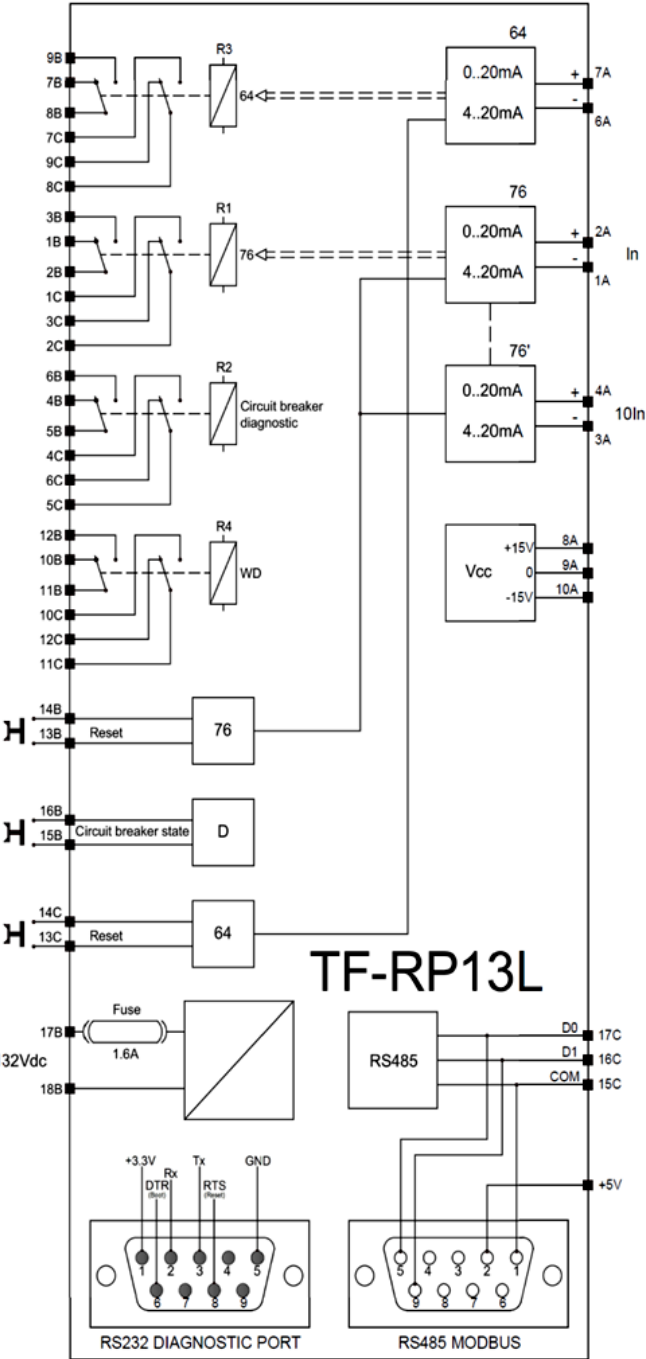
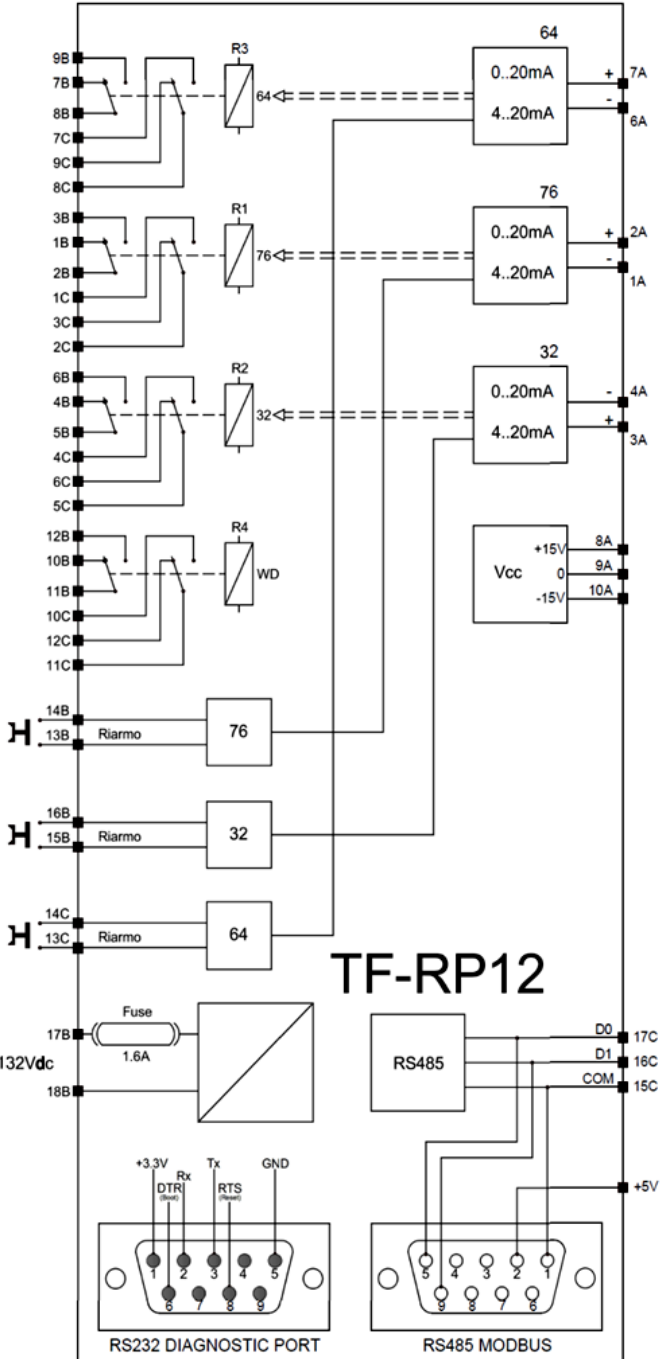
ISSUED BY: **AQ**

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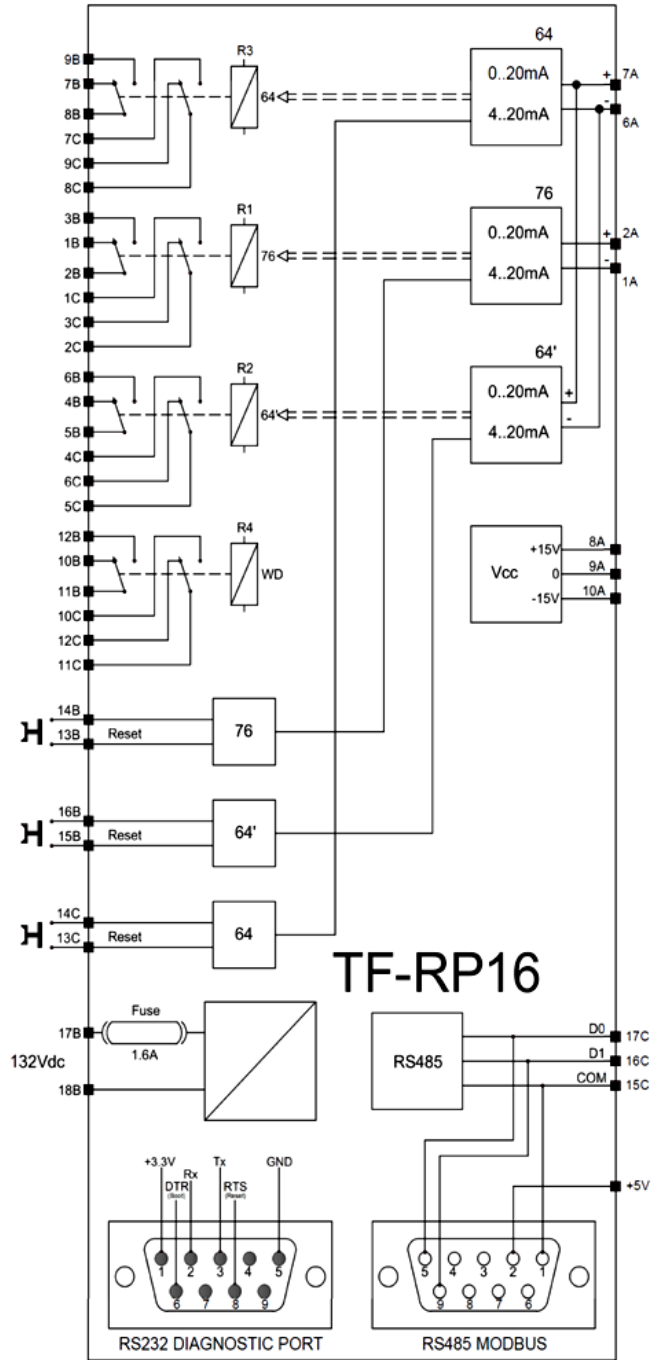
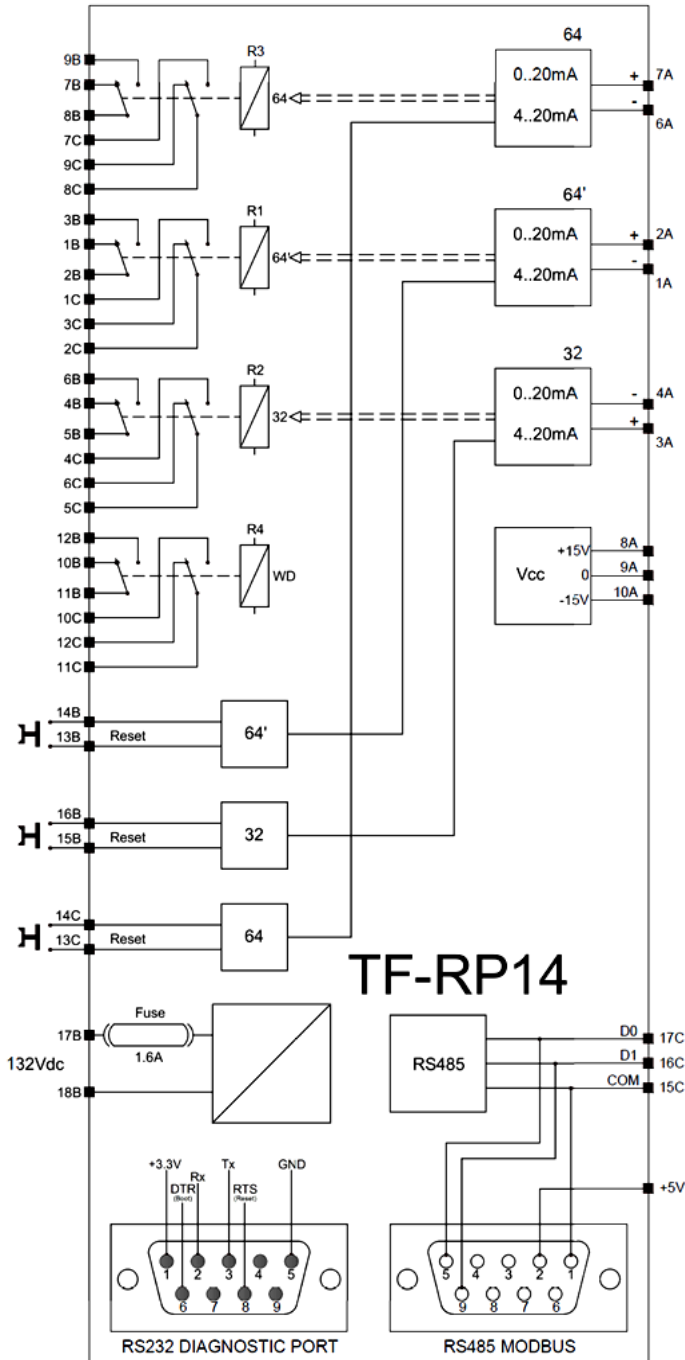
DATE: **08/09/2016**

FUNCTIONS			
-	Line protection against failures and overcurrents		
-	Measure of line voltage and current and of other relevant parameters		
-	Oscillographic recording of events		
-	Self diagnostic		
-	Modbus interface		
-	Simple user interface thanks to an intuitive set of commands and menus		
-	Big recording memory		
-	Alphanumeric display with 2 lines of 16 characters for an easy reading of values and events		
-	Capture of oscilloperturbographic recording of events with pre and post trigger		
-	Visualization of oscilloperturbographic recordings through an external PC		
-	Wide parametrization allows an easy adaptation to the installation requirements		
-	Continuous self test with remote signalling of malfunctions		
INPUTS AND OUTPUTS			
-	3 analog inputs 0..20 mA / 4..20 mA		
-	n.1 watchdog relay output for self-test, missing power supply, unconnected cable		
-	n. 3 relays outputs with double throw, double pole. Each relays is freely programmable for N.O. or N.C. contacts		
-	n. 1 power supply output (+/- 15Vcc) for external Hall effect sensor for channel 64		
COMMUNICATION PORTS AND PROTOCOLS			
-	n. 1 x RS485 (Modbus)		
-	n. 1 x RS232		
POWER SUPPLY			
-	100 .. 353Vdc		
WEIGHT			
-	1,1kg		
DEVICE	FUNCTIONS		INPUTS
TF-RP12	76	Max current	0-20mA / 4-20mA (Function 76)
	32	Reverse current	0-20mA / 4-20mA (Function 32)
	64	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC
TF-RP13L	76	Max current	0-20mA / 4-20mA (Function 76)
	76'	Max current - 10In input	0-20mA / 4-20mA (Function 76')
	64	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC
		High speed breaker diagnostics	
		Inhibition of functions after breaker closure	
		Thermal image protection of the cable/line	
		Max current variation di/dt relate	
		Max I²t	
TF-RP14	64	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC or TFCB
	64'	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC or TFCB
	32	Reverse current	0-20mA / 4-20mA (Function 32)
TF-RP16	76	Max current	0-20mA / 4-20mA (Function 76)
	64'	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC
	64	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC
TF-RPAL	27	Minimum Voltage	0-20mA / 4-20mA (Function 27)
	32	Reverse current	0-20mA / 4-20mA (Function 32)
	64	Switchboard/Cable earth	0-20mA / 4-20mA (Function 64). TA through TFC

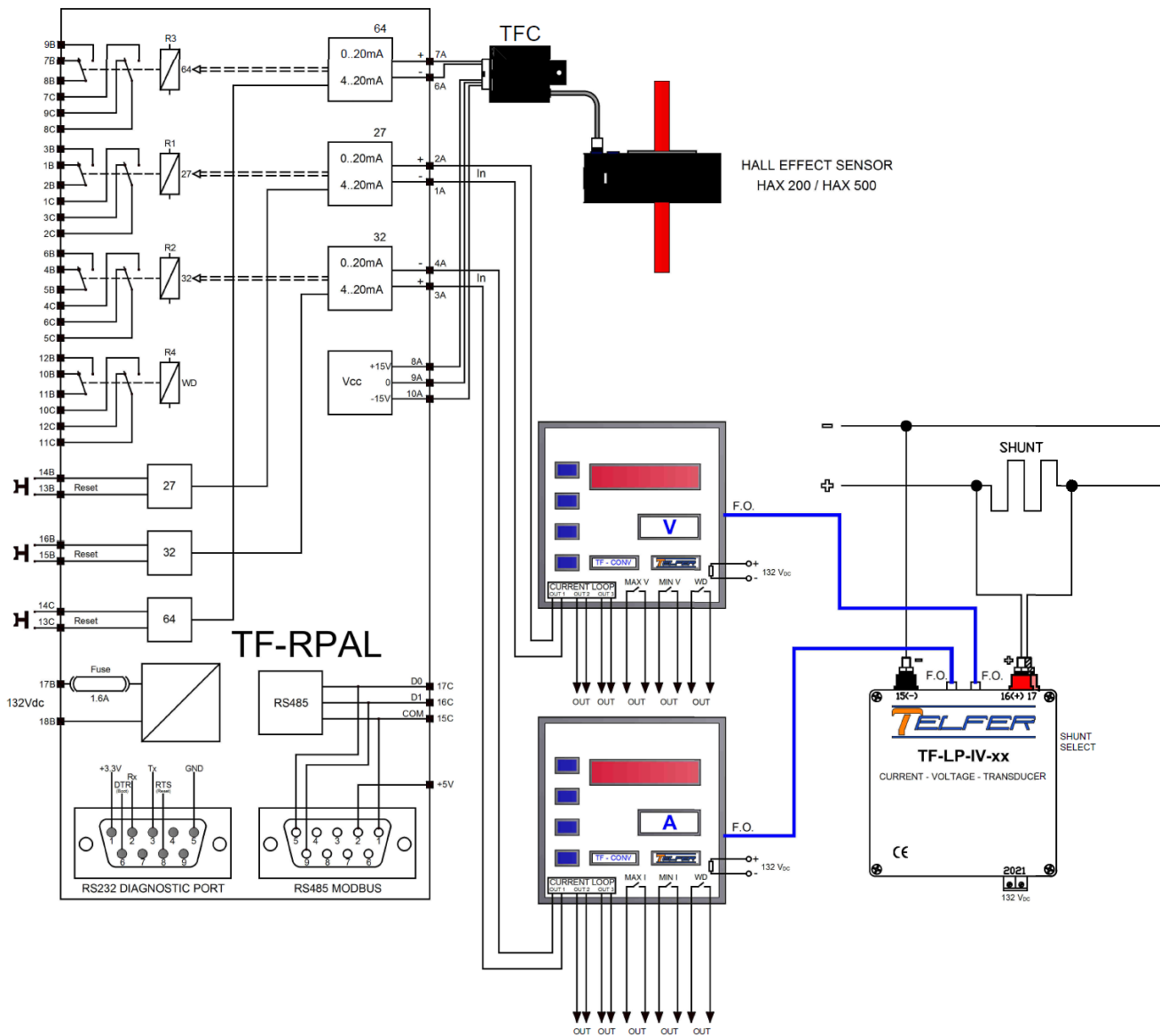
TF-RP12 & TF-RP13L BLOCK DIAGRAMS



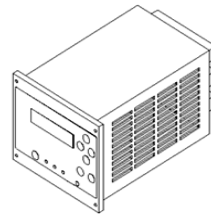
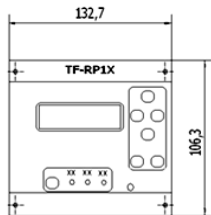
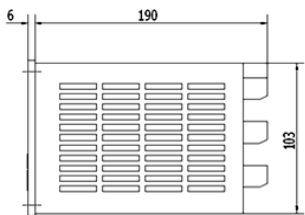
TF-RP14 & TF-RP16 BLOCK DIAGRAMS



TF-RPAL CONNECTIONS LAYOUT



TF-RP1X SIZE



DIMENSIONS IN [mm]

T.EL.FER. CAN VARY THE PRODUCTS SPECIFICATIONS IN ANY MOMENT WITHOUT NOTICE