



PROTECTION RELAYS

MHIT-363A

Voltage transducer for monitoring and protection of traction line up to 3kVcc (RFI DMA IM LA SP IFS 363A - Rev.A)

Voltage presence system is designed to monitor and protect traction line up to 3kVdc.

It is composed by a self-powered transmitter unit, and a receiver installed in the substation, with analogue and digital output , connected by fibre optic.



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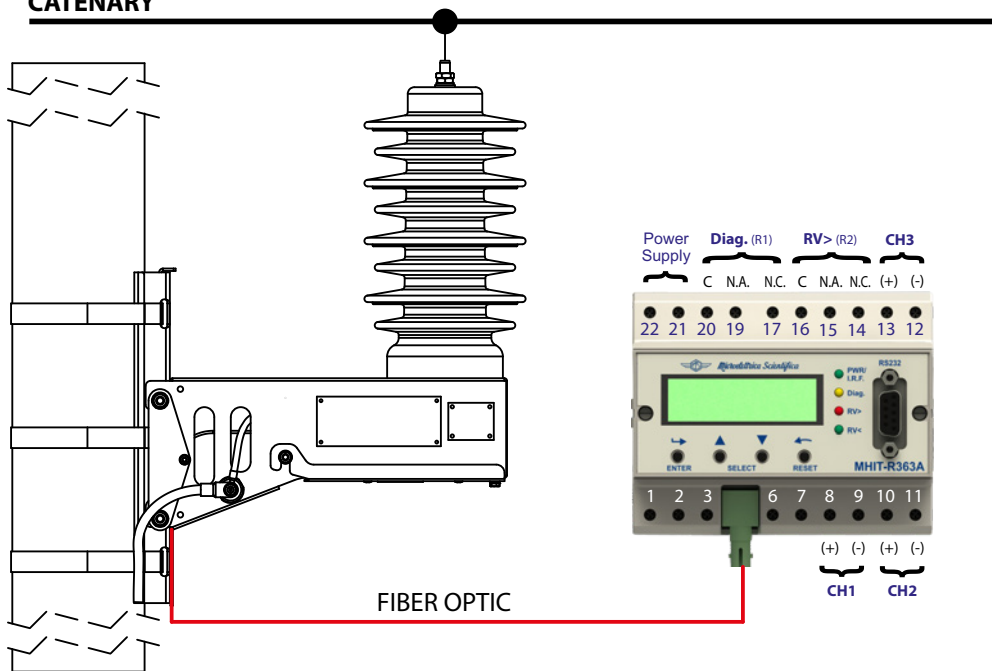
General Characteristics

Rated input voltage	3kVcc
Power Supply	Direct from Catenary (1200 ÷ 3900)Vcc
Voltage accuracy	1%
Thermal stability	0.01% F.C./°C
Outputs	Fiber Optic type 62.5/125 (glass), connection type ST
Enclosure	Protection degree IP65
Connections terminals	Bolt type terminals (M12) for inputs Bolt type terminals (M8) for grounds / ST for Fiber Optic

Receiver Characteristics

Input	Fiber Optic from Transmitter MHIT-T363A
Analog Output	$(0 \div 30)\text{mA} = (0 \div 6000)\text{Vcc} - F(V/I) = 200\text{V/mA}$
Maximun analog burder	250 ohm
Response Time	$\leq 1\text{ms}$
Enclosure	ABS Protection degree IP42
Voltage Range	$(1000 \div 6000)\text{V}$, step 1V
Accuracy	3%
Signalization	3 Leds
Output Realys	2

CATENARY



REFERENCE STANDARD CE Directive - EN50123 - IEC60255 - RFI DMA IM LA SP IFS 363A

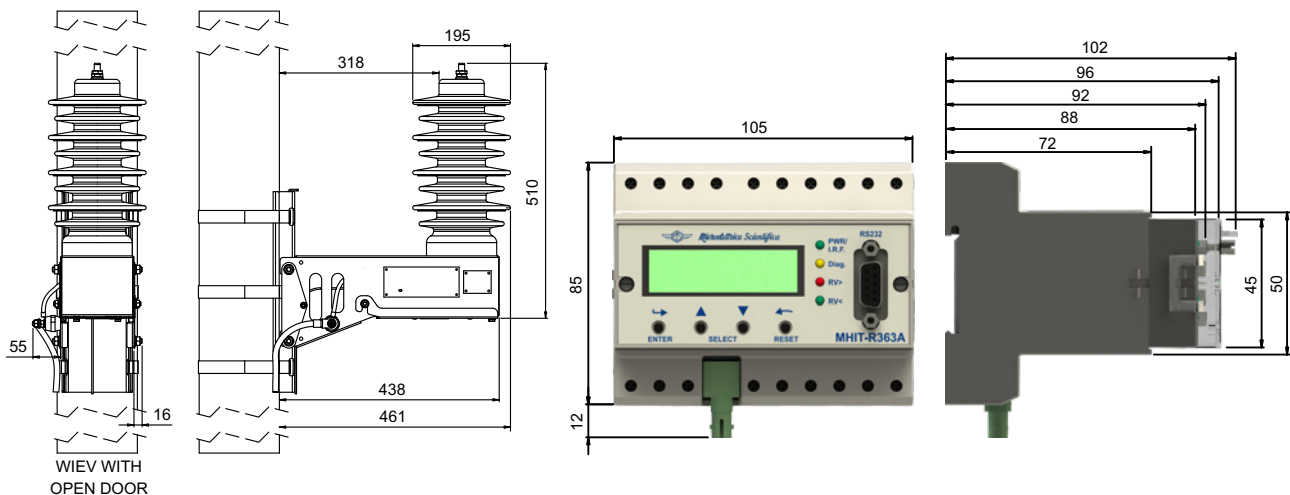
Dielectric test voltage	IEC60255-5	cat IV - 2kV
	EN60383-1	(60kV - 1min)
Impulse test voltage	IEC60255-5	cat IV - 5kV
	EN60383-1	(140kV 1.25/50us)

Environmental Rif.Std.

Operation ambient temperature	EN60870-2-2	class C1 (3k5)	-20 C / +55 C
Resistance to vibration	IEC60255-21-1	class 2	10-500 Hz ; 2 g
Resistance to vibration and shock (bump-shock)	IEC60255-21-2	class 1	10 g - 15 g
Sismatic stress resistance	IEC60255-21-3	class 2	1 g (xy), 2 g (z)

CE EMC Compatibility

Electromagnetic emission	EN55011		30-1000MHz (tab1 EN50081-2)	A
Conducted disturbances immunity test	EN55022	class B	0.15-30 MHz (tab1 EN50081-2)	10V A
Radiated electromagnetic field immunity test	EN60870-2-1 A.5.1 → IEC61000-4-3	level 3	80-1000MHz 80%AM	10V/m B
	EN50082-2 → EN50140, EN50204	level 3	900MHz/200Hz	10V/m A
	EN50082-2 → ENV50140	level 3		
Electrostatic discharge test	EN60870-2-1 A.3.1 → IEC61000-4-2	level 3	6kV contatto / 8kV aria	B
Power frequency magnetic test	EN60870-2-1 A.4.1 → IEC61000-4-8	level 5	continui 100 A/m	50/60Hz A
Conducted disturbances immunity test	EN50082-2 → IEC61000-4-6	level 3	(80 ±5)% AM1 kHz sinwave	A
Damped oscillatory magnetic field	EN60870-2-1 A.4.3 → IEC61000-4-10	level 3	30 A/m, 0.1÷1 MHz	
Electrical fast transient/burst (Fast Transient)	EN60870-2-1 A.2.3 → IEC61000-4-4	level 3	2kV (m.c.)	B
Dumped Oscillatory waves	EN60870-2-1 A.2.5 → IEC61000-4-1	level 3	1kV (m.c.)	
Power supply tolerance	IEC60870-2-1	class DC3 class AC2		
Surge immunity test	EN60870-2-1 A.2.2 → IEC61000-4-5	level 3	8/20µs 2kV (m.c.)	B



The technical specifications reported are not binding and they should be agreed in the contract.

For further technical information on our products visit www.microelettrica.com

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