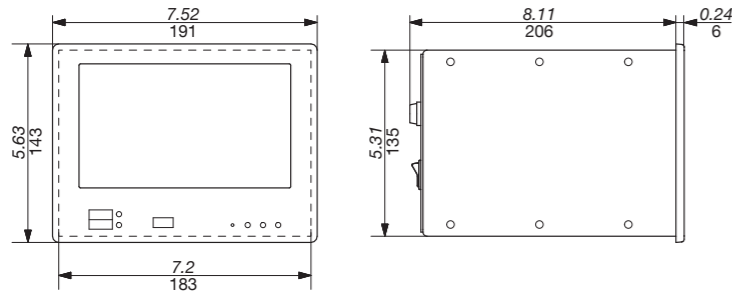
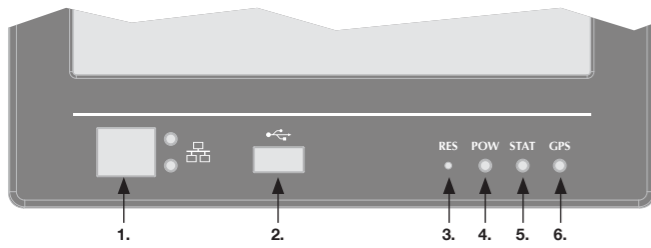




# 1 Dimensions in/mm

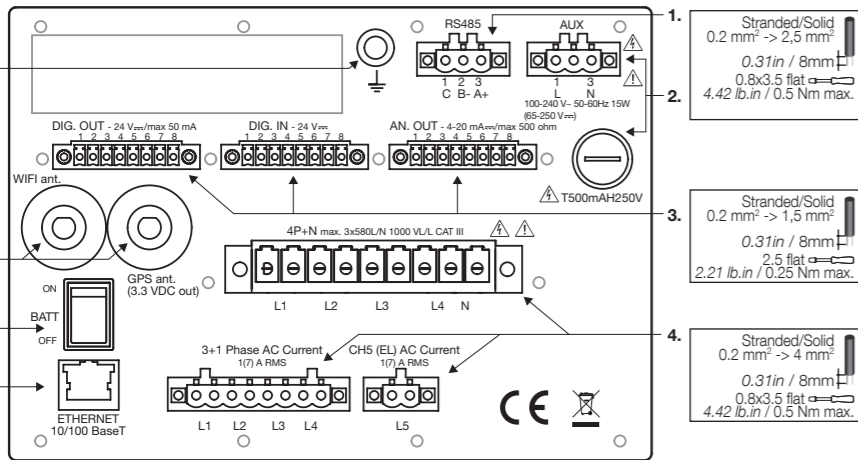


# 3

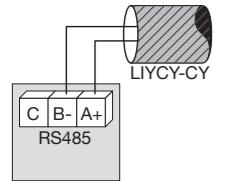


1. Front Ethernet port
2. USB host port
3. Set default/Reset button
4. LED auxiliary power supply status
5. LED instrument operating status
6. LED RTC synchro status with GPS

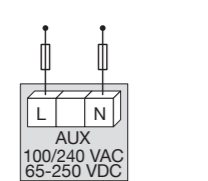
# 8



## 1. Communication via RS485 link SELV part



## 2. AC and DC auxiliary power supply

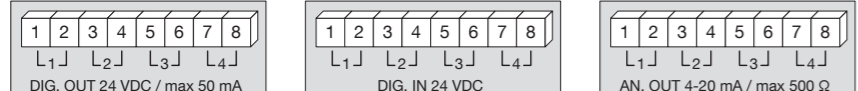


To fulfill the EMC requirements, install the included big ferrites at a maximum 5 cm distance from the device on connection cables of:

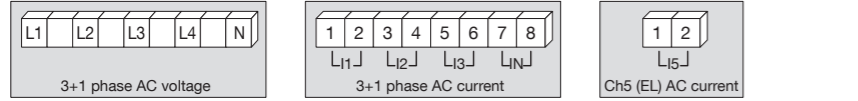
- Protective earth terminal
- Power supply terminal
- Current terminal (only CT instrument model)

Make sure the cable is wound 3 turns inside the ferrite. If the cable length is not enough, use an extension cable of at least 40 cm about. Please refer to the following picture:

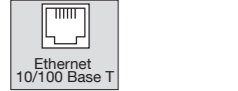
## 3. Digital / analogic outputs SELV parts (Safety extra low voltage)



## 4. Current and voltage inputs



## 5. Auto MDIX Ethernet port



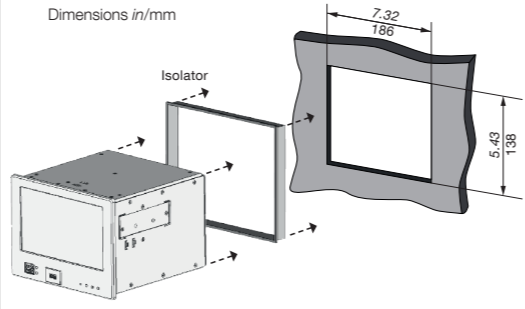
## 6. Battery switch

## 7. GPS and WIFI antenna

## 8. Earth connection

Connect the grounding cable to the instrument protective earth (M6) and fix the screw with locking washer.  
 For direct current applications (VDC), do not connect the protective earth to the negative pole of the power supply terminal.

# 2 Mounting



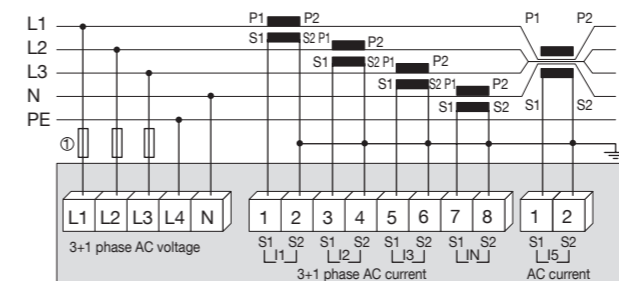
# Technical characteristics

AUXILIARY POWER SUPPLY	
Auxiliary power voltage Refer to the value indicated on the instrument	100...240 VAC 50/60 Hz / 65...250 VDC
Frequency	19...60 VDC on request
Power consumption	50/60 Hz
Backup battery	Max. 15 VA
	Li-ion 2500 mAh
MEASUREMENT INPUTS	
Direct voltage measurement input	P-N: max 580 V RMS CAT III L-L: max 1000 V RMS CAT III
U4 direct voltage measurement input	Max 580 V RMS CAT III
Voltage input crest factor	2
Current inputs	Max 7 A RMS
Current input consumption	0.04 VA
Current input crest factor	3
Voltage input impedance	> 6 MΩ
Frequency range	42.5 to 57.5 Hz/51 to 69 Hz
Voltage reference channel	U1N/U12
Sampling	51.2 kHz @50 Hz
ACCURACY	
Three-phase voltage	± 0.1%
4 <sup>th</sup> voltage (neutral/earth)	± 0.2%
Currents	± 0.2%
Power	± 0.2%
Frequency	± 10 mHz
Harmonics	Class 1 IEC/EN 61000-4-7
Active energy	Class 0.2S IEC/EN 62053-22
Reactive energy	Class 1 IEC/EN 62053-24
COMMUNICATION	
Ethernet ports	2 Auto MDIX RJ45 10/100 Base Ethernet
RS485 opto-insulated port (slave)	0.5 UL 2400 to 115200 bps
Passive WIFI antenna	SMA male connector
Active GPS antenna	SMA female connector
Protocols	HTTP, HTTPS, FTP, SFTP, NTP, NMEA, Modbus RTU/TCP, WPA, SMTP
USB port	USB 2.0
Instrument IP address	192.168.0.5
Netmask	255.255.0.0
Gateway IP address	192.168.0.1
Administrator password	Admin
ENVIRONMENTAL CONDITIONS	
Operating temperature (max. range)	- 25 °C to + 55 °C
Storage temperature	- 25 °C to + 75 °C
Humidity	Max. 95 %
Max. altitude	2000 m
STANDARDS AND SAFETY	
Product conformity	IEC/EN 62586-1, IEC/EN 62586-2
Safety	Inputs measurement CATIII Auxiliary power supply OVCIII, insulation class 2
Degree of pollution	2 (EN 61010-1)
Degree of protection	IP40 front, IP20 rear
Directive	RED §3.1a Health EN 62311 :2008 RED §3.1b EMC
REFERENCE	
DIPIS Q800	Ref. 4826 0100 <sup>(1)</sup>

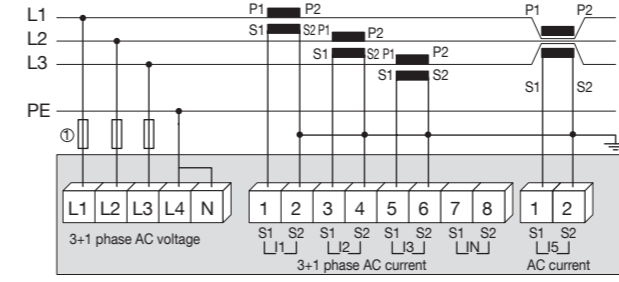
<sup>(1)</sup> Power supply 19...60 VDC; please contact us.

# 4 1. 0.5 A gG / 0.5 A class CC fuses.

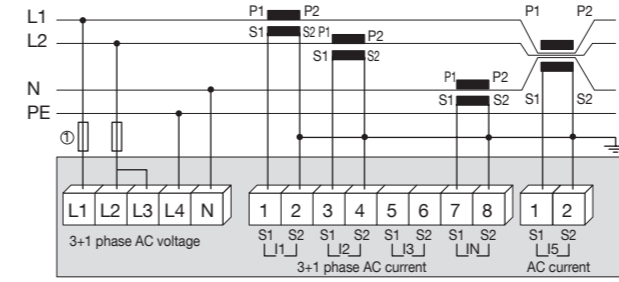
## Direct connection : 3 phases, 4 wires, 4 CT (3.4.4)



## Direct connection : 3 phases, 3 wires, 3 CT (3.3.3)

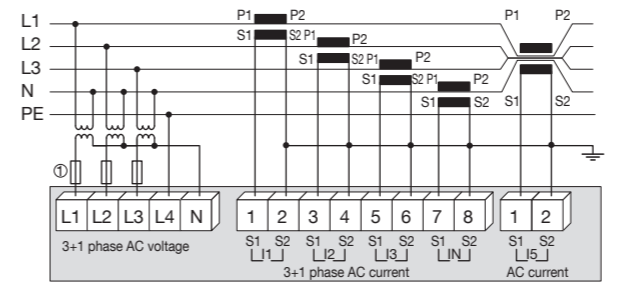


## Direct connection : 2 phases + neutral, 3 wires, 3 CT (2.3.3)

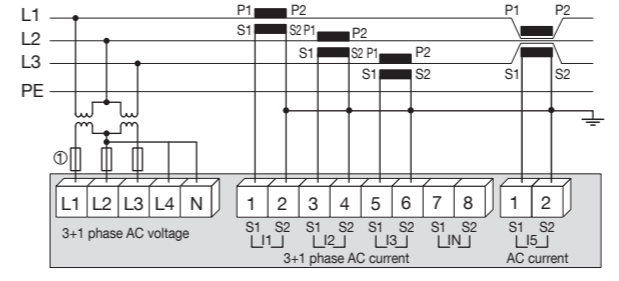


# 1. 0.5 A gG / 0.5 A class CC fuses.

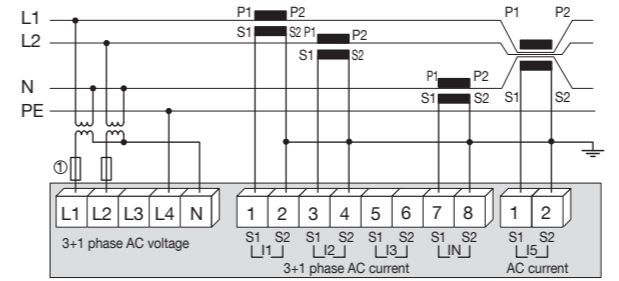
## Connection with VT : 3 phases, 4 wires, 4 CT (3.4.4)



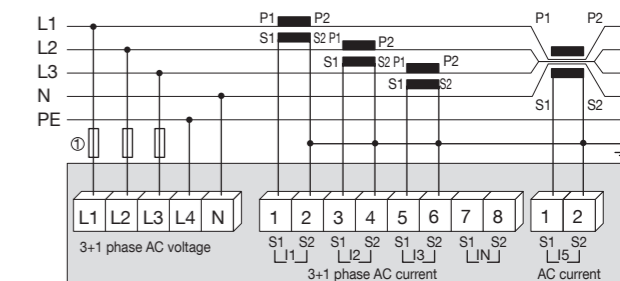
## Connection with VT : 3 phases, 3 wires, 3 CT (3.3.3)



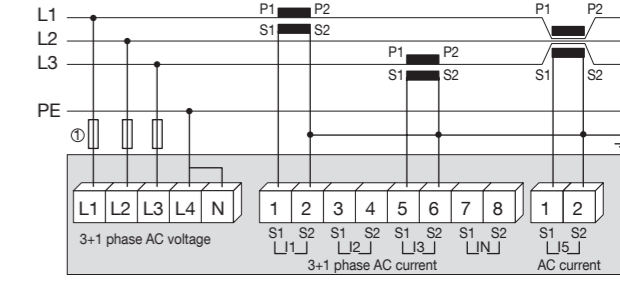
## Connection with VT : 2 phases + neutral, 3 wires, 3 CT (2.3.3)



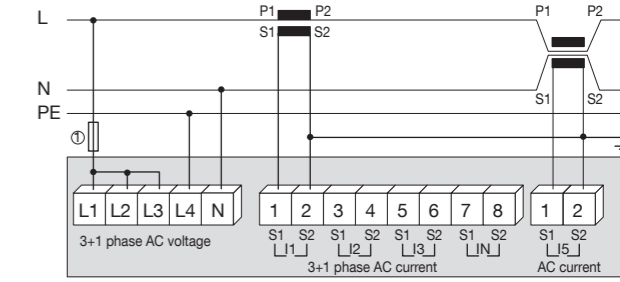
## Direct connection : 3 phases, 4 wires, 3 CT (3.4.3)



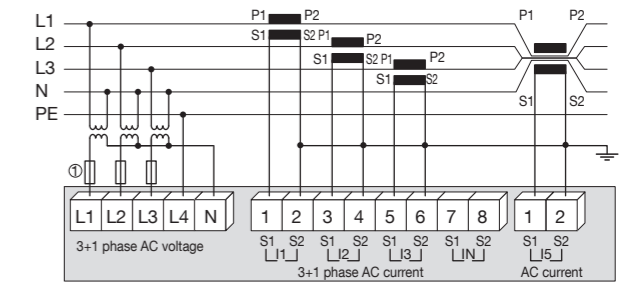
## Direct connection : 3 phases, 3 wires, 2 CT (3.3.2)



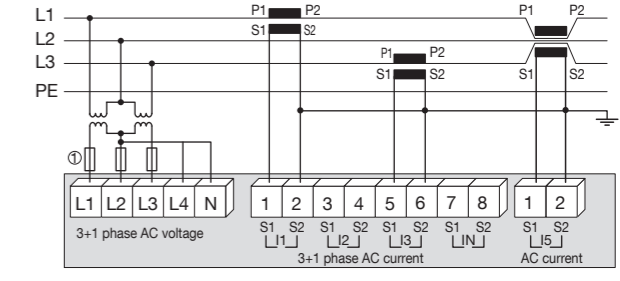
## Direct connection : 1 phase, 2 wires, 1 CT (1.2.1)



## Connection with VT : 3 phases, 4 wires, 3 CT (3.4.3)



## Connection with VT : 3 phases, 3 wires, 2 CT (3.3.2)



## Connection with VT : 1 phase, 2 wires, 1 CT (1.2.1)

