



Connection via CT for single and three-phase network, 3 or 4-wires.
Phase sequence correction, diagnostic.
Can be accessorised with up to 4 additional modules.

Functions

- Phase and linked voltage
- Min. and max. phase voltage
- THDV
- Neutral and phase current
- Current demand and current max. demand
- Average current
- THDI
- Active, reactive phase power
- Power demand and power max. demand
- Positive and negative active and reactive energy
- Power factor
- Frequency
- Run hour meter, count start with voltage or power present

Cat. Nos.	Nemo 96HD			
	Input (A)	Input* (V)	Auxiliary supply	Output
MF96001	1 + 5	80...500	80...265Vac 100...300Vdc	up 4 additional modules
MF96002	1 + 5	80...500	16...60Vdc	up 4 additional modules

* Three-phase input 80...500V, Single -phase input 50...290V

Cat. Nos.	Additional modules	
	Descriptions	
IF96001	Module RS485 Modbus RTU/TCP	
IF96012	Module RS485 Modbus RTU/TCP + memory	
IF96002	Module RS232 Modbus RTU/TCP	
IF96007A	Module Profibus EN50170 - DP0	
IF96009	Module LonWorks	
IF96013	Module M-Bus EN1434-3	
IF96014	Module RS485 BACnet MS-TP	
IF96015	Module Ethernet	
IF96003	Module with 2 energy pulse outputs (SPST)	
IF96004	Module with 2 x 0/4...20mA analogue outputs	
IF96005	Module with 2 alarm relay outputs (SPST)	
IF96006	Neutral current measurement from CT /1A or 5A programmable	
IF96016	Module temperature measurement 2 inputs from PT100	
IF96010	Module with 2 input SPST-NO 2 relay outputs SPST-NO	
IF96011	Module with 2 input 12/24Vcc 2 relay outputs SPST-NO	

Technical features

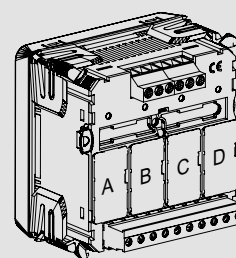
TECHNICAL NOTES	NT680
INPUT	
Three-phase voltage (V)	80...500 (phase-phase)
Single-phase voltage (V)	50...290V
Current rating	1A - 5A
External CT ratio	max 50kA/5A - max 10kA/1A
External VT ratio	primary voltage max 1200V
Continuous overload	1,2In
Istantaneous overload	20Imax/0,5s
Reference frequency	50Hz
Frequency tolerance	45...63Hz
Type of measurement	true RMS
Voltage rated burden (VA)	≤ 0,1VA (phase-neutral)
Current rated burden (VA)	≤ 1VA (for phase)
AUXILIARY SUPPLY	
Rated value Uaux	80...265Vac
Reference frequency	50
Frequency tolerance	45...63Hz
Rated burden	≤ 2,5VA (230Vac backlight 30% without external modules)
Rated value Uaux	100...300Vdc 11...60Vdc
Rated burden	≤ 3,5W (without modules)
ACCURACY	
CONFORMITY ACCURACY WITH EN/IEC 61557-12	- Voltage: cl.0,5 - Current: cl. 0,5 - Active energy: cl.0,5 - Reactive energy cl.1 - Active power cl.0,5 - Reactive power cl.1 - Apparent power cl.1 - Frequency cl.0,5 - Power factor cl.0,5 - THD cl.2
DISPLAY	
Type of display	LCD backlit
Digit height	12mm
Energy resolution	depending on the CT/VT ratio**
MECHANICAL FEATURES	
Housing	flush mounting (panel cutout 92x92mm)
Front frame	96x96mm
Housing material	self-extinguishing polycarbonate
Protection degree	IP20 terminals/ IP54 front frame
Connections type	screw terminals
Rigid cable	max 4,5mm ²
Flexible cable	max 2,5mm ²
ENVIRONMENTAL CONDITIONS	
Nominal temperature range	-5...55°C
Limit range for storage and transport	-25...70°C
Suitable for tropical climates	yes
Max.power dissipation*	≤5W

* for switchboard thermal calculation

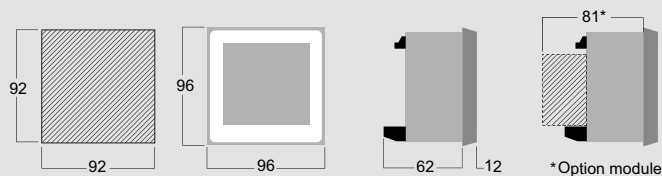
** kCT*kVT	MAXIMUM DISPLAY
1...9	999999,99kWh/kvarh
10...99	9999999,9kWh/kvarh
100...999	99999999kWh/kvarh
1000...9999	999999,99MWh/Mvarh
10000...99999	9999999,9MWh/Mvarh
100000...400000	99999999MWh/Mvarh

Output

ADDITIONAL MODULES	
N. max installable module	4
Installation position	A-B-C-D

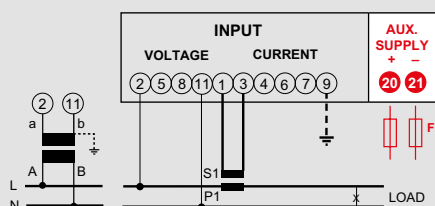


Dimensions

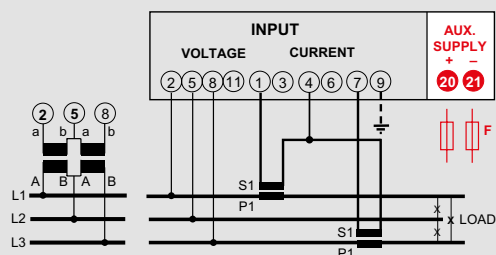


Wiring diagrams

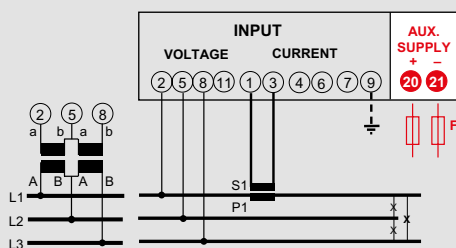
Single phase network



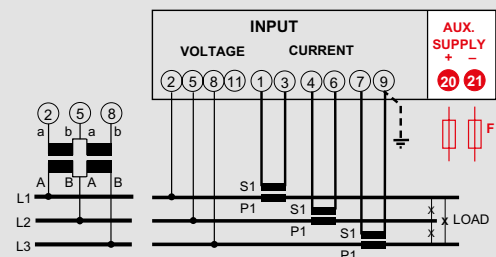
3-phase network, 4 wire (ARON L1-L3)



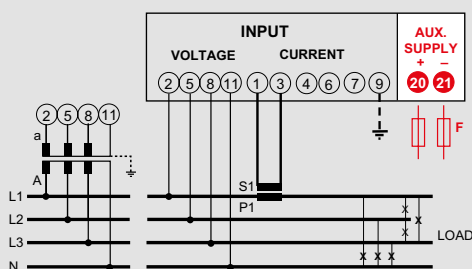
3-phase network, 3 wire, 1 System



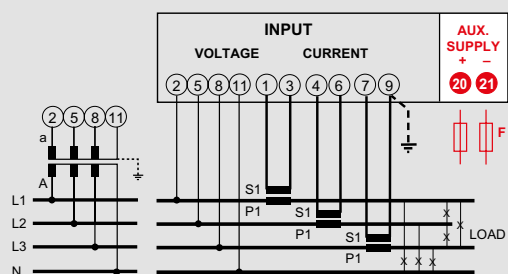
3-phase network, 3 wire



3-phase network, 4 wire, 1 System



3-phase network, 4 wire



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For pricing or any further information, please contact Omni Instruments Ltd.