Product leaflet

DELTAplus

Three phase electricity energy meters from ABB

The DELTAplus is an advanced meter for installation in three phase and single phase networks. The meter is mounted on a DIN rail and is suitable for installation in distribution boards and small encloses such as consumer units. The meter measures active energy. The product supports a wide voltage range and a wide temperature range which makes it suitable for installation in many applications.

General features

DELTAplus is an meter that is easy to handle. It is easy to read the large LCD display with 7 mm high digits and symbols for load indication, errors etc. The meter has LED on the front that flashes proportionally to the measured energy. The energy consumption of the meter is very low, less than 0.6 VA.

Instrumentation

Through the instrumentation functionality of DELTAplus, the following electrical properties can be read

- Active power
- Current
- Voltage
- Frequency
- Power factor

Approval

DELTAplus is type approved according to IEC and it is both type approved and verified according to MID. MID is the Measuring Instruments Directive 2004/22/EC from the European Commission. MID type approval and verification is mandatory for meters in billing applications within EU and EEA.

The type approval is according to standards that covers all relevant technical aspects of the meter. These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

Ordering details

6 A, CTVT connected, 7 DIN

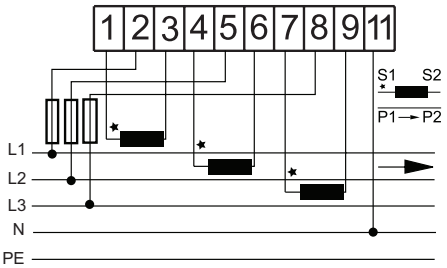
Voltage V	IR port	Pulse output	Type	Order code	Weight 1 pc
Active import measurement, Tree phase, class B (Cl. 1), Verified and approved according MID, IEC approval.					
3 x 57.7...288/ 100-500 V AC	Yes	Yes	DAB13000	2CMA180806R1000	0.331

DELTAplus
Technical data

	DAB 13000
Voltage/current inputs	
Nominal voltage	3 x 57-288/100-500 (4-Wire)
Voltage range	-20% to +15% of nominal voltage
Nominal current I_n	1.0
Maximum current I_{max}	6 A
General data	
Frequency	50 or 60 Hz ± 5%
Accuracy Class	B (Cl. 1)
Power consumption current circuits at 230 V AC and I_{ref}	0.001 AV, 0.001W per phase
Power consumption voltage curcuits	0.5 VA, 0.5 W total
Memory back-up	EEprom
Temperature range (ºC)	
Operating	-40 to +55
Storage	-40 to +70
Transformer ratios	
Voltage transformer ratio (VT)	1 - 9 999
Current transformer ratio (CT)	1 - 9 999
Max transformer ratio	CT x VT max 999 999
Enclosure material	
Upper	Polycarbonate
Lower	Glassfibre reinforced polycarbonate
Environment	
Humidity	75% yearly average, 95% on 30 days/year
Resistance to heat and fire	According to IEC 60695-2-10, IEC 60695-2-11, Terminal 960ºC,
Mechanical environment	M1
Electromagnetic environment	E2
Connection area main terminals	
Current terminals 1 x mm²	0.5 - 10
Voltage terminals 1 x mm²	0.5 - 10
Protection against penetration of dust and water	IP 20 on terminal block without pretective enclosure *)
Pulse outputs	
Connection area, main terminals, - 1 x mm²	0 - 2.5 (For combined meters 0 - 0.5)
External pulse voltage	
- Voltage (V) DC	N/A
- Voltage (V) AC/DC	0 247 (solid state relay polarity independent)
Max. current (mA)	0 - 100
Pulse length (ms)	100 (± 2.5)
Pulse frequency (imp/kWh)	Programmable (Default 100)
Standard	IEC 62053-31 (SO)
LED	
Pulse frequency (imp/kWh)	5000 (secondary registering)
Pulse length (ms)	40
Display	LCD with 7 digits, height 7 mm
Electromagnetic compability (EMC)	
Inpuls voltage test (kV)	6, 1.2 / 50µs (IEC 60060-1, HD 588.1 S1)
Fast transient burst test (kV)	4 (IEC 61000-4-4)
Radio frequency immunity	80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3)
Electrostatic discharge (ESD) (kV)	15 (IEC 61000-4-2)
Terminal wire area (mm²)	
M-Bus	0 - 2.5
LonWorks FTT-10A	0 - 2.5
Standards	
MID approval according to	EN 50470-1, EN 50470-3
International approval according to	IEC 62052-11, IEC 62053-21, IEC 62053-23
Dimensions	
Width	122.5 mm
Height	97 mm
Depth	64.8 mm
DIN modules	7

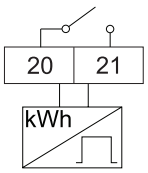
Wiring diagram

With neutral conductor, 4 wire

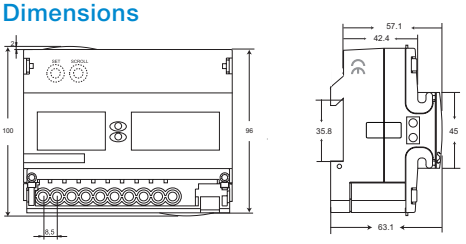


Pulse output.

External power supply up to 247 V AC or DC



Dimensions



To get more information, install QR code reader on your mobile device, scan the code and see more.

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