

Power supply unit AN420

Power supply unit for
measuring current transformers



Product description

The power supply unit AN420 is used to supply measuring current transformers of the W...AB series. The CTs are to be supplied with a symmetrical supply voltage of DC $\pm 12\text{ V}$ using a pre-fabricated connecting cable of the WXS... series.

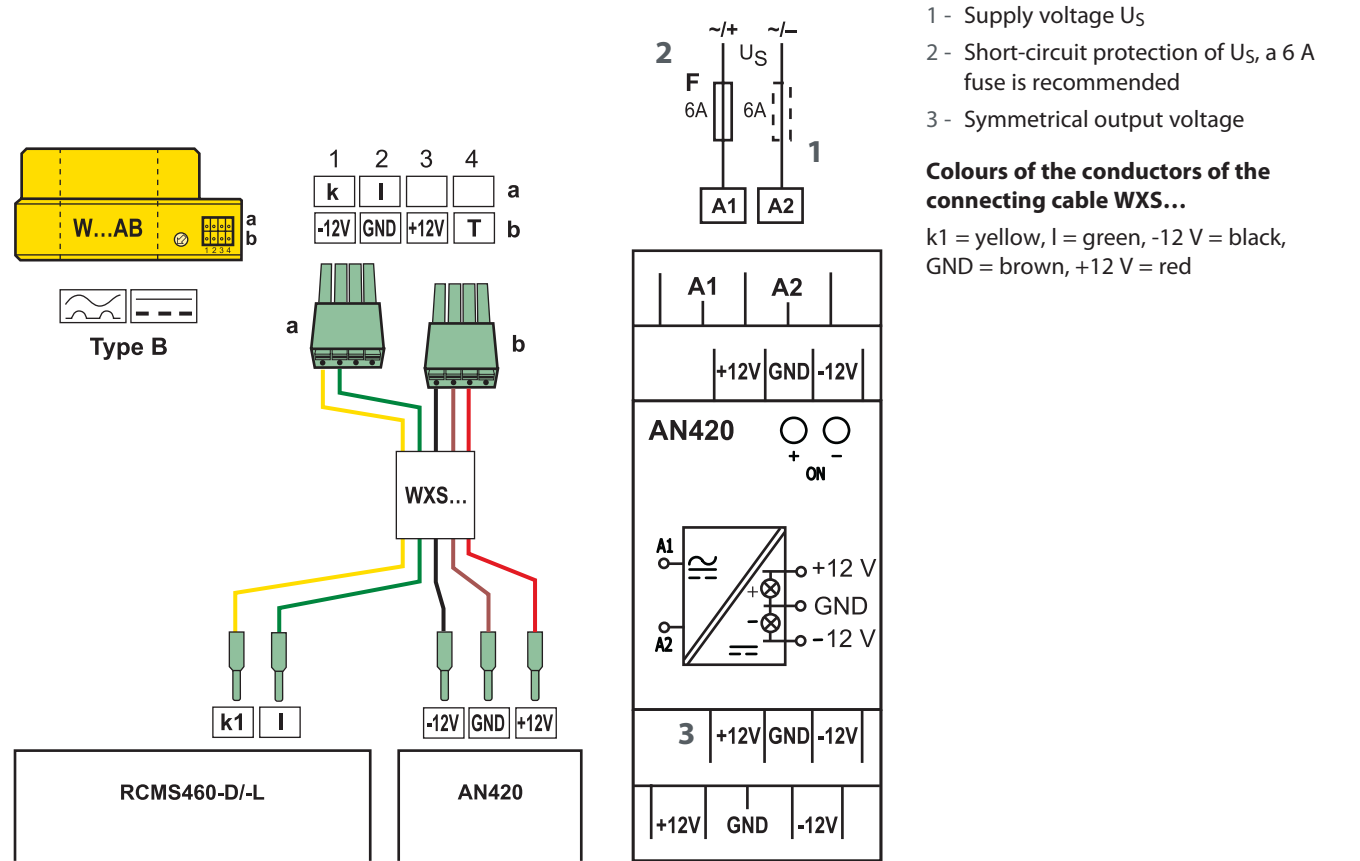
The power supply unit is capable of supplying a maximum of six measuring current transformers of the W...AB series.

The ON LEDs $+12\text{ V}$, -12 V indicate that the symmetrical output voltage of $\pm 12\text{ V}$ is applied.

Approvals

Wiring diagram



Technical data

Insulation coordination acc. to IEC 60664-1 / IEC 60664-3

Rated insulation voltage	AC 250 V
Rated impulse voltage / pollution degree	4 kV / III
Protective separation (reinforced insulation) between	(A1, A2) - (+12 V, GND, -12 V)
Voltage test according to IEC 61010-1	2.21 kV

Supply voltage

Supply voltage U_S	AC / DC 70...276 V
Frequency range of U_S	DC, AC 42...460 Hz
Power consumption	≤ 30 VA

Output of the power supply unit

Output voltage	DC ± 12 V, short-circuit proof
Operating range	11.9...12.1 V
Rated output	9 W

Cable length

Recommended cable	WXS100...WXS1000 (see ordering information)
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Environment / EMC

EMC	DIN EN 61000-6-4 DIN EN 61000-6-2
Operating temperature	-25 °C...+55 °C
Climatic class acc. to IEC 60721	
Stationary use (IEC 60721-3-3)	3K5 (except condensation and formation of ice)
Transport (IEC 60721-3-2)	2K3 (except condensation and formation of ice)
Storage (IEC 60721-3-1)	1K4 (except condensation and formation of ice)
Classification of mechanical conditions IEC 60721	
Stationary use (IEC 60721-3-3)	3M4
Transport (IEC 60721-3-2)	2M2
Long-time storage (IEC 60721-3-1)	1M3

Connection

Connection	screw terminals
rigid / flexible / conductor sizes	0.2...4 / 0.2...2.5 mm ² / 24...12 AWG
Multi-conductor connection (two conductors of the same cross section)	
rigid / flexible	0.2...1.5 mm ² / 0.2...1.5 mm ²
Stripping length	8...9 mm
Tightening torque	0.5...0.6 Nm

Other

Operating mode	continuous operation
Mounting position	see dimension diagram and screw fixing
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Enclosure material	polycarbonate
Flammability class	UL94 V-0
DIN rail mounting acc. to	IEC 60715
Screw mounting	2 x M4 with mounting clip
Instruction leaflet	BP409017
Weight	≤ 140 g

Ordering information

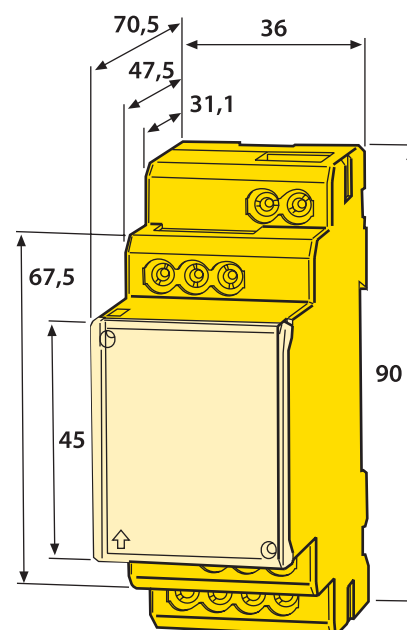
Type	Supply-voltage U_S	Output-voltage	Art. No.
AN420-2	DC / AC 42...460 Hz 70...276 V	DC ± 12 V 400 mA	B 9405 3100
Mounting clip for screw fixing (1 piece per device, accessories)			B 9806 0008

Connecting cables for measuring current transformers of the W...AB series

Type	Length	Art. No.
WXS-100	1 m	B 9808 0506
WXS-250	2.5 m	B 9808 0507
WXS-500	5 m	B 9808 0508
WXS-1000	10 m	B 9808 0509

Dimension diagram XM420

Dimensions in mm – Open the front plate cover in direction of arrow!



Screw mounting

Note: The upper mounting clip must be ordered separately (see ordering information)!

