

Product data sheet

Specifications



Transformer, Minera, Tier2, oil type, 160kVA, 15/20kV, 410V, 24kV

MIN016015202003

Main

Product range	Minera
Product or component type	Transformer
Transformer type	Oil type transformer
Dielectric liquid	Mineral oil
Network type	AC
Standards	EN/IEC 60076 EN 50588-1
Type of installation	Indoor
Maximum altitude	< 1000 m
Cooling mode	ONAN (oil natural air natural)
Winding material	Aluminium
Degree of protection	IP21 low voltage cable box
Mounting mode	Ground mounted

Complementary

Directives	2021/2014/548/EC- ecodesign
Phase	3 phases
Rated power	160 kVA
Rated frequency	50 Hz
Rated primary voltage	15/20 kV
Secondary voltage (at no-load)	No load: 410 V
Insulation voltage to industrial frequency (50 Hz 1 mn)	50 kV primary 3 kV secondary
Rated insulation level	Primary circuit: 24 kV Secondary circuit: 1.1 kV
Lightning impulse withstand voltage (BIL) , 1.2/50 μ s	125 kV for primary circuit
Vector group	Dyn11
HV tappings (off circuit)	+/- 2 x 2.5 % +/- 2 x 3.3 %
Short circuit impedance	4 %
No-load losses	217.4 W

Load losses at 75°C	1925 W at 75 °C
Temperature rise of windings	60 K (oil) 65 K (winding)
Thermal class	A
Sound power level	35 dB at 1 m
Electrical connection	Plug-in bushing high voltage connection Porcelain bushing low voltage connection
Protective relay	DMCR relay
Locking options description	Without keylocks Bushing locking device
Height	1308 mm +/- 20 mm
Width	828 mm +/- 20 mm
Length	970 mm (+/- 20 mm)
Total weight	805 kg +/- 5 % 135 kg +/- 5 % oil

Environment

Maximum ambient temperature	40 °C
Ambient air temperature for operation	-20...40 °C
Ambient air temperature for storage	-20...40 °C
Environmental certification	0...95 %
Corrosion category	C3

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	805.0 kg
Package 1 Height	130.8 cm
Package 1 Width	82.8 cm
Package 1 Length	97.0 cm

Offer Sustainability

REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information

Recommended replacement(s)