

OIL INSULATED TRANSFORMER DATA SHEET

Ambient temperature (min)	°C	-20	Code: -
Ambient temperature (max)	°C	45	Corrosive environment classification: C4-H
Max. installation altitude	m a.s.l.	1,000	Losses according to EU 548/2014 Tier 2 / EU 2019/1783
TRANSFORMER FOR OUTDOOR INSTALLATION			
Electrical Features			Accessories Included
Type	-	Hermetic	Integrated safety detector protection relay for electrical transformers (DGPT2 or equivalent). Detection: <ul style="list-style-type: none"> • Gas discharge or drop of the dielectric level (1 contact) • Internal pressure (1 contact) • Dielectric temperature (2 contacts) Reading: <ul style="list-style-type: none"> • Dielectric temperature • Dielectric level or gas volume PT100 sensor for oil temperature N. 3 H.V. terminals plug-in bushings Elastimold type N. 3 L.V. terminals, IP00 bushings N. 2 Earth terminals in stainless steel N. 1 Electrostatic shield in between primary & secondary windings IP55 junction box for auxiliary connections Pressure release valve Oil filling device with breather valve Oil draining device First oil filling Lifting lugs Towing hooks Registration plate with data Documentation: User and installation guide in English language Bulletin related to the test applied Oil Certificate Certificate of conformity
Insulating fluid	-	Mineral Oil	
Power	kVA	3,550 @ 35°C	
Power	kVA	3,385 @ 40°C	
Power	kVA	3,220 @ 45°C	
Primary voltage	kV	30	
Secondary voltage	kV	0.640	
Off load tap changer	%	± 2 × 2.5	
Primary phase current	A	68.3	
Secondary phase current	A	3,202	
Vector group	-	Dy11	
Frequency	Hz	50	
Cooling system	-	ONAN	
No load current	%	0.5	
Insulation levels - primary side	kV	36 / 70 / 170	
Insulation levels - secondary side	kV	3.6 / 10	
Winding material - primary side	-	Aluminum	
Winding material - secondary side	-	Aluminum	
Sound pressure level, LpA	dB(A)	TBD	
No Load losses	W	2,670	
Load losses (75°C)	W	26,600 (*)	
Impedance voltage, V _{sc}	%	7 (*)	
-	-	-	
-	-	-	
Series resistance R (primary side)	Ω	TBD	
Series reactance X (primary side)	Ω	TBD	
Voltage drop	cos φ = 0.8	100%	TBD
Efficiency	cos φ = 0.8	50%	TBD
Efficiency	cos φ = 0.8	75%	TBD
Efficiency	cos φ = 0.8	100%	TBD
Max temperature rise - oil	K	60 (**)	
Max temperature rise - windings	K	65 (**)	
Winding hot spot	K	78 (**)	
Mechanical Features			
Hermetic / Expansion vessel	-	Hermetic	
Overall protection rating ⁽¹⁾	-	IP55	⁽¹⁾ Excluding MV/LV terminals
Length	mm	TBD (***)	
Height	mm	TBD (***)	
Depth	mm	TBD (***)	
Oil weight	kg	TBD (***)	
Unit total weight	kg	TBD (***)	

Transformers in this specification are engineered, manufactured and tested according to IEC 60076 Standard.
 The transformers are suitable for outdoor installations under direct solar radiation.
 Ingeteam qualified suppliers: ABB, Siemens, SEA, GBE, CELME, Westrafo, Trafo Elettro, Newton Trasformatori, Ormazabal, Alkargo Transformers, IMEFY SL, Telawne Power Equipments, ELTAS, BEST Transformers, Sanil Electric Co., GE, SGB-SMIT Group.

(*) Referred to 3,550 kVA at 35°C ambient temperature (Peak Efficiency Index ≥ 99.525%).
 (**) Referred to 40°C ambient temperature.
 (***) Ingeteam reserves the right to change mechanical data maintaining unmodified the electrical characteristics.