TRIHAL HE

UP TO 3150 KVA, 12 KV, LOSSES A_0 A_k

PM102308

Trihal HE - C3* E3 F1 5pC
High Efficiency Cast Resin Transformer

Standard

These transformers comply with standards:

- IEC 60076-11 and IEC 60076-16
- NF EN 50541-1

Schneider Electric guarantees that its transformers are silicone free and certified:

- C3* Climatic class
- E3 Environment class according to IEC 60076-16
- F1 Fire behaviour class
- Almost partial discharge free - Acceptance level:

- ≤ 10 pC Routine Test
- ≤ 5 pC Special Test according to IEC 60076 standard

* C2 Thermal shock test carried out at -50°C

Description

Cast resin, 50 Hz, three-phased distribution transformers with the following characteristics:

- Indoor use / Outdoor use with properly designed enclosure
- Thermal class F - Temperature rise 100 K
- Ambient ≤ 40°C, altitude ≤ 1000 m
- MV windings encapsulated in cast resin
- Pre-impregnated LV windings
- Natural air cooling system (AN type)
- Core and frame covered with protective coating
- Anti-corrosion surface treatment : corrosivity category class C2, “Medium” durability (according to ISO 12944-2)

Standard fittings

Trihal without enclosure (IP00):

- HV voltage variation by off circuit tapping links
- 4 bi-directional flat rollers
- 4 lifting holes
- 4 haulage holes on the underbase
- 2 earthing points
- 1 rating plate (on HV side)

Trihal with IP31 metal enclosure:

- Trihal IP00 as above
- IP31 metal enclosure (except the bottom: IP21):

- 2 lifting lugs for transformer and enclosure assembly
- 1 earthing point on enclosure
- access to HV tapping by removing a bolted panel
- enclosure final colour RAL9002

Optional fittings

- Temperature sensors located in the e LV windings
- Electronic temperature monitor
- (Z converter or T digital thermometer)
- + 40 % AF cooling system with fans
- Custom enclosures with special paint colors, IP level (up to IP44) or anti-corrosion treatment
- Earthing balls, Surge arrestors, Antivibrations pads
- 3 HV plug-in bushings (IP00 or IP31)
- Locking device for plug-in bushings (lock in option)
- 3 mobile connectors for plug-in bushings straight or elbow (cable characteristics must be specified)

The above descriptions / options concern usual cases and are not restrictive. For any other requests (special site conditions, temperature rise, housing design, etc..), please consult us.

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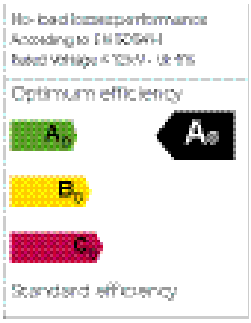

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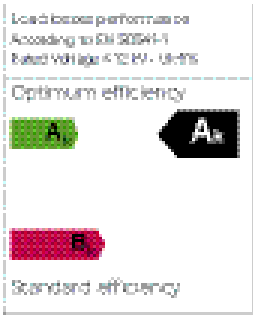

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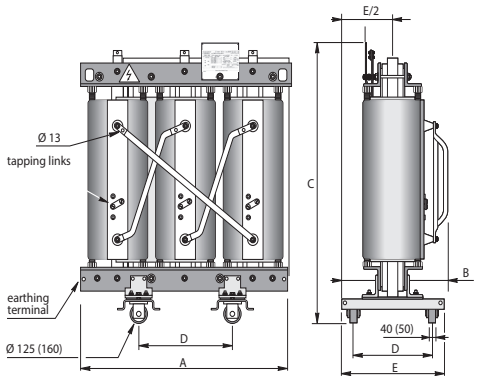
Electrical characteristics

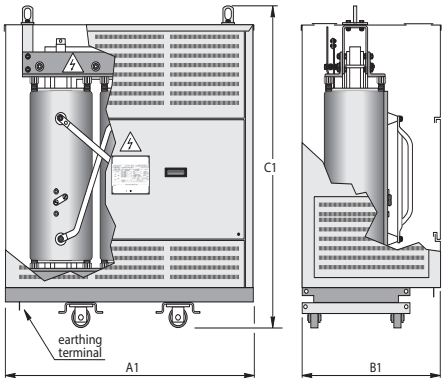
Power kVA	160	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Primary voltage Secondary voltage	10 kV 400V												
Isolation level	12kV												
HV Tapping range	± 5 %												
Vector group	Dyn 11, Dyn 5, Dyn 1 (other vector groups upon request)												
No-load losses (w) Load losses at 75°C (w) load losses at 120°C (w)	350 2270 2600	500 2970 3400	590 3400 3900	700 3920 4500	830 4920 5650	1000 6180 7100	1100 6960 8000	1300 7830 9000	1500 9570 11000	1800 11310 13000	2200 13480 15500	2600 16090 18500	3150 19140 22000
Impedance voltage (%)	6	6	6		6		6	6	6	6	6	6	6
Acoustic Level dB(A): - power LWA - pressure LPA (1m)	 54 43	 57 45	 59 47	 60 48	 61 48	 62 49	 64 50	 65 51	 67 53	 68 54	 70 55	 71 56	 74 59

Dimensions and weights

Without enclosure (IP00)



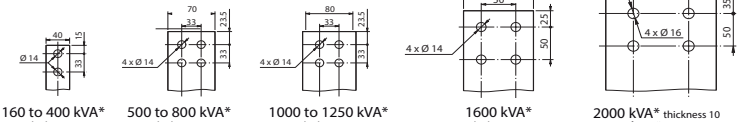
With IP31 metal enclosure



Rated power (kVA)		160	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Without enclosure IP00														
Dimensions (mm)	-A	1080	1190	1220	1300	1300	1380	1540	1580	1640	1680	1800	1800	1960
	-B	650	660	800	800	800	800	800	950	950	950	1200	1200	1200
	-C	1280	1300	1390	1410	1620	1660	1860	1880	1940	2070	2220	2170	2360
	-D	520	520	670	670	670	670	670	820	820	820	1070	1070	1070
	-E	715	715	795	795	795	795	795	945	945	945	1195	1195	1195
Masse totale (kg)		800	1020	1160	1360	1540	1900	2640	2820	3360	3760	4900	5160	6580
With IP31 metal enclosure														
Dimensions (mm)	-A1	1650	1650	1700	1700	1900	1700	1900	2000	2000	2000	2330	2330	2260
	-B1	950	950	1020	1020	1100	1020	1100	1170	1170	1170	1270	1270	1020
	-C1	1750	1750	1900	1900	2300	1900	2300	2400	2400	2400	2650	2650	2760
Weight enclosure (kg)		180	180	200	200	240	200	240	240	240	280	350	360	420
Total weight (kg)		980	1200	1360	1560	1780	2100	2880	3060	3600	4040	5250	5520	7000

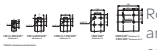
Terminations

LV Terminations



*Valid for aluminium terminations.

HV Terminations - EN 50180



Routine fittings such as bar and cable supports, flexible connectors, etc. will be supplied by the contractor, who will ensure that the transformer terminals are not subject to mechanical stresses.

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