

High voltage 40-2000 kVA, IP00

Type 3HT-00

Open three-phase high-voltage transformer with power range from 40 to 2000 kVA. Designed and tested according to norm IEC60726/ IEC60076. Degree of protection IP00. Standard types supplied with separate primary and secondary windings. This generates "a new system" in which any earth faults are eliminated.

Applications:

High-voltage technique/transformers are ideal when low losses and limited size on short circuit protection is desirable. Noratel high-voltage dry-

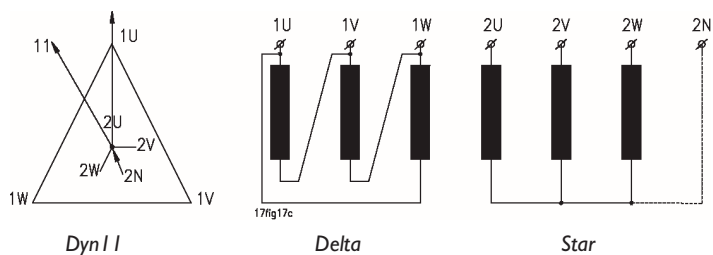
type transformers is well suited, unlike oil-filled transformers, for installation indoors as close to the load as possible. Specially suited for installation in ships and oilrigs, hotels, shopping centres and other industrial buildings. Custom designed types with other voltages, frequencies, electrostatic shield between primary and secondary, regulations, tappings, transport wheels or other features are available upon request.

Technical specifications

- Input voltage: 3x3,0 to 3x12,0kV
- Frequency: 47-63Hz
- Output voltage: 3x115 to 3x1000V
- Vector group: Dyn11 (standard)
Other vector groups on request
- According to: IEC60076
D.N.V.
- Test voltage: 10-28kV /
3kV AC RMS
- Construction class: I
- Insulation class: F (155°C) - standard
H (180°C)
- Ambient temp. (t_0): 45°C
- Degree of protection: IP00
- Type of termination: Cu-bars

Supplied with Al-bars for termination from 630 kVA with high currents.

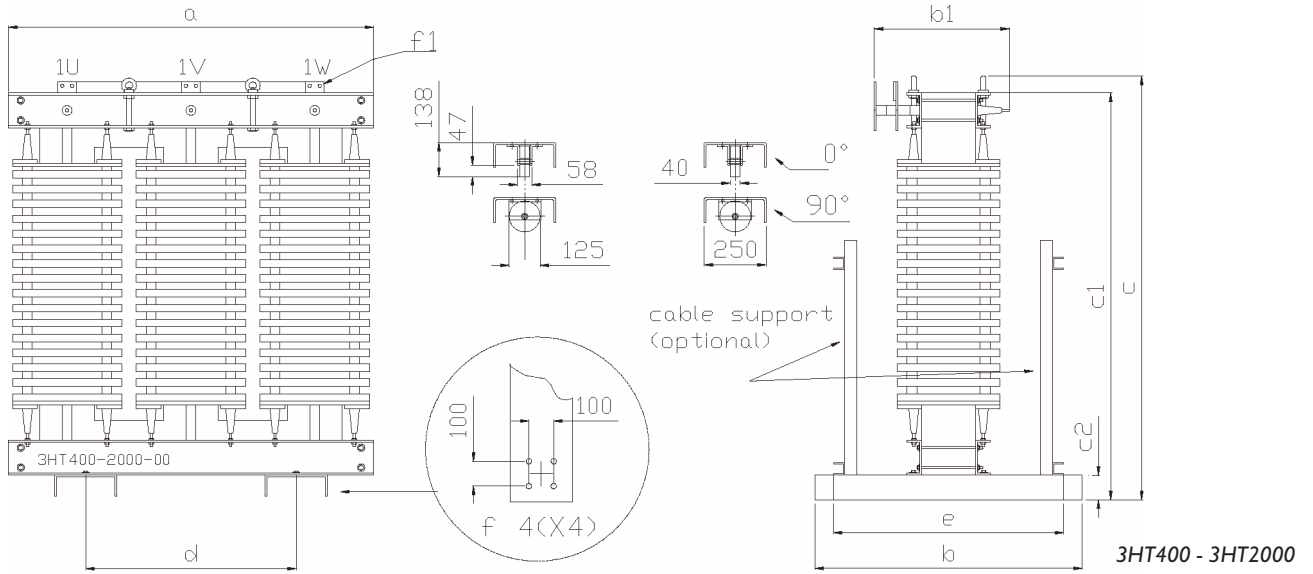
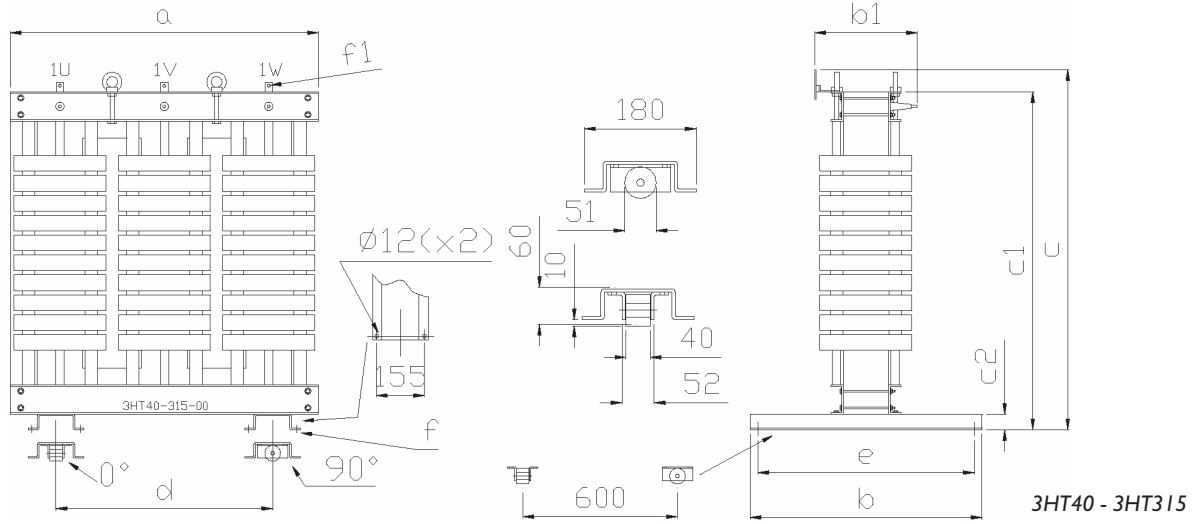
Standard vector group:



Accessories:

- Cable glands on primary/secondary [CG]
- Wheels for transport [WH]
- Temperature control units with alarm or trip [TC]
- PEN-link [PL]
- Top entry [TE]
- PT100 sensors [PT]
- RTD sensors [RTD]
- PTC sensors [PTC]
- Thermometer [TM]

Noratel declare and guarantee that all transformers are designed according to the following standards; IEC60076, D.N.V., EN55014:1993 (EN55014-1:1997), EN61000-3-2:1995, EN61000-3-3:1995, EN55104:1995, (EN55014-2:1997), EN50081-1:1992, EN50082-2:1995 based on the following directives; L.V.D 73/23/EEC, 93/68/EEC, EMC 89/336/EEC, 91/263/EEC.



Standard types 3HT-00

Power (kVA)		Type	Length a	Width b	Height c	b1	Dimensions (mm)			f	Weight (kg)	
cl. F	cl. H						c1	c2	d			e
40	45	3HT 40.0	810	750	820	425	750	50	550	725	14,0	300
50	56	3HT 50.0	810	750	820	425	750	50	550	725	14,0	320
63	70	3HT 63.0	810	750	820	430	750	50	550	725	14,0	390
80	89	3HT 80.0	900	750	860	480	790	50	550	725	14,0	490
100	110	3HT 100	980	750	960	480	890	50	550	725	14,0	570
125	138	3HT 125	980	750	960	480	890	50	550	725	14,0	670
160	175	3HT 160	980	750	960	480	890	50	700	725	18,0	715
200	220	3HT 200	1050	750	1060	495	970	50	700	725	18,0	850
250	275	3HT 250	1050	750	1060	495	970	50	700	725	18,0	975
315	350	3HT 315	1125	750	1100	495	1010	50	700	725	18,0	1200
400	440	3HT 400	1275	1080	1190	515	1100	100	850	850	18,0	1450
500	550	3HT 500	1275	1080	1340	655	1250	100	850	850	18,0	1700
630	700	3HT 630	1275	1080	1440	655	1350	100	850	850	18,0	1900
800	888	3HT 800	1425	1080	1730	625	1640	100	850	850	4x11,0	2300
1000	1100	3HT 1000	1500	1080	1780	645	1680	100	850	850	4x11,0	2800
1250	1380	3HT 1250	1500	1080	1780	655	1680	100	850	850	4x11,0	3100
1600	1750	3HT 1600	1575	1080	1820	665	1720	100	850	850	4x11,0	3800
2000	2200	3HT 2000	1725	1080	1860	690	1760	100	850	850	4x11,0	4900

Losses and short circuit currents

3-HT standard types

Type	FE-loss (W)	CU-loss (W)	e_z (%)	e_r (%)	I_c (xI_{nc})
3HT					
3HT 40	300	1000	4,0	2	18
3HT 50	300	1050	4,5	2	18
3HT 63	300	1100	4,5	2	18
3HT 80	400	1200	4,5	1,5	18
3HT 100	550	1400	4,5	1,4	14
3HT 125	550	1600	4,5	1,4	14
3HT 160	600	2000	4,5	1,3	14
3HT 200	800	2200	4,5	1,1	14
3HT 250	900	3200	5,0	1,0	14
3HT 315	1000	3300	5,0	0,9	12
3HT 400	1200	3400	5,0	0,9	12
3HT 500	1400	4500	5,0	0,9	12
3HT 630	1600	5000	5,0	0,9	12
3HT 800	1700	6000	5,0	0,8	10
3HT 1000	2200	7500	5,0	0,8	10
3HT 1250	2500	9500	5,0	0,8	10
3HT 1600	2800	12000	5,0	0,8	10
3HT 2000	3300	14000	5,0	0,7	10