

High voltage 40-2000 kVA, IP23

Type 3HT-23

Capsulated three-phase high-voltage transformer with power range from 40 to 2000 kVA. Designed and tested according to IEC60726/IEC60076.

Steel plate enclosure, degree of protection IP23.

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 in-

doors as close to the load as possible.

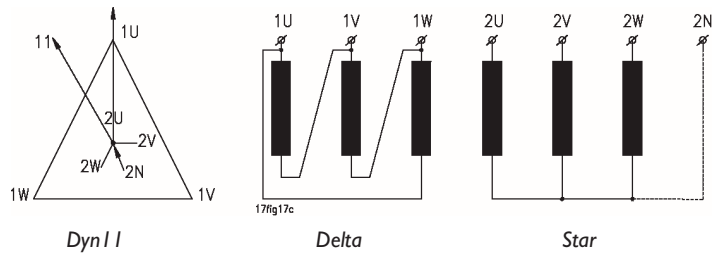
Specially suited for installation in ships and oilrigs, hotels, shopping centres and other industrial buildings. Custom designed types with other voltages, frequencies, electrostatic shield between primary and secondary, regulations, tappings, transport wheels or other features are available upon request.

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: IP23
- Type of termination: Cu-bars

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

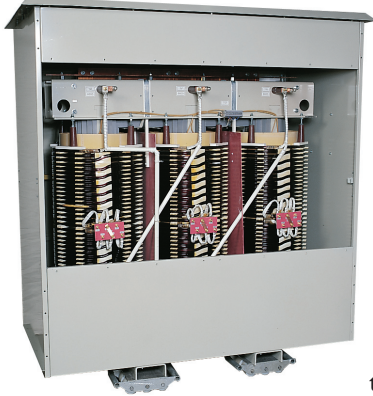
Standard vector group:

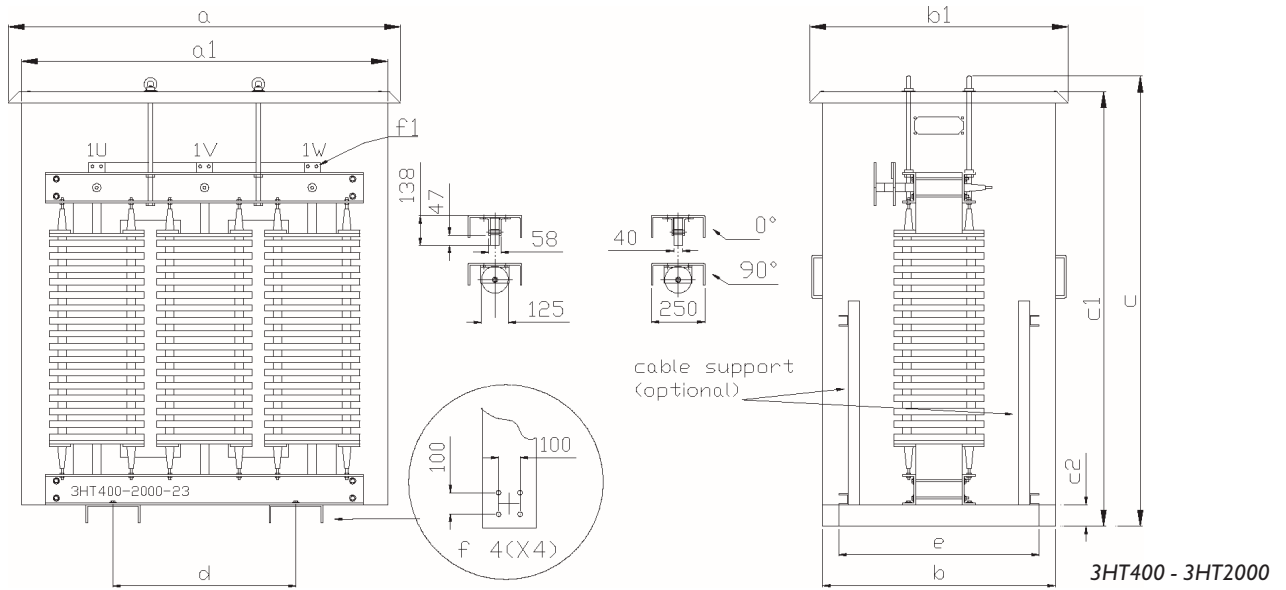
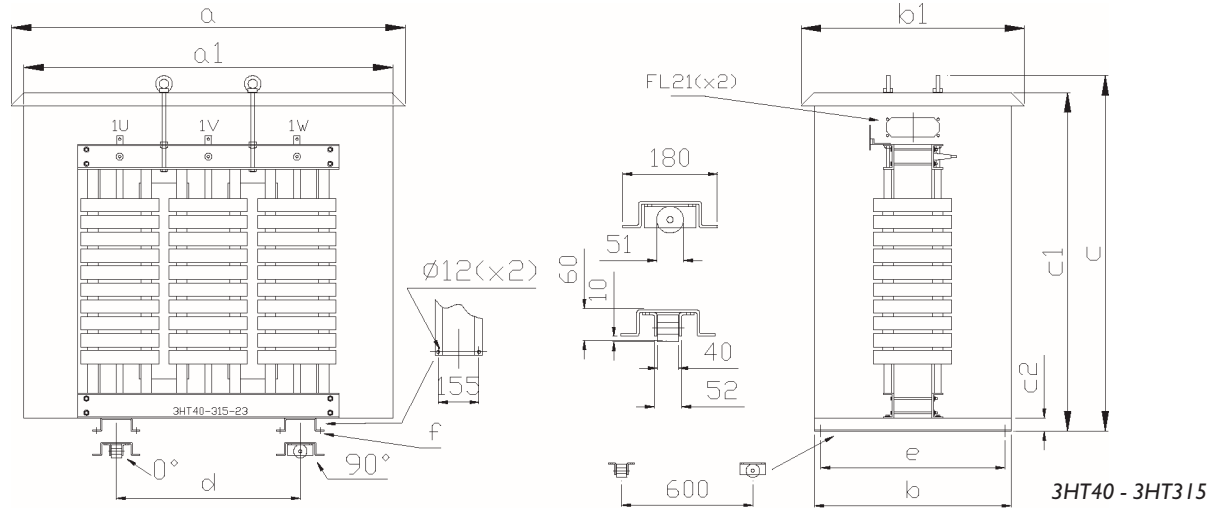


Accessories:

- 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]
- Thermographic windows [TW]

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-23

Power (kVA)		Type	Length a	Width b	Height c	Dimensions (mm)						Weight (kg)	
<i>cl.F</i>	<i>cl.H</i>					<i>a1</i>	<i>b1</i>	<i>c1</i>	<i>c2</i>	<i>d</i>	<i>e</i>		<i>f</i>
40	45	3HT40	1250	750	1200	1155	850	1135	50	550	600	2x12	380
50	56	3HT50	1250	750	1200	1155	850	1135	50	550	600	2x12	400
63	70	3HT63	1250	750	1200	1155	850	1135	50	550	600	2x12	470
80	89	3HT80	1250	750	1200	1155	850	1135	50	550	600	2x12	570
100	110	3HT100	1250	750	1200	1155	850	1135	50	550	600	2x12	650
125	138	3HT125	1250	750	1200	1155	850	1135	50	550	600	2x12	750
160	175	3HT160	1500	750	1350	1405	850	1260	50	700	600	2x12	800
200	220	3HT200	1500	750	1350	1405	850	1260	50	700	600	2x12	930
250	275	3HT250	1500	750	1350	1405	850	1260	50	700	600	2x12	1060
315	350	3HT315	1500	750	1350	1405	850	1260	50	700	600	2x12	1285
400	440	3HT400	1820	1080	1650	1726	1180	1585	100	850	850	4x11	1650
500	550	3HT500	1820	1080	1650	1726	1180	1585	100	850	850	4x11	1900
630	700	3HT630	1820	1080	1650	1726	1180	1585	100	850	850	4x11	2100
800	888	3HT800	1820	1080	2090	1700	1200	2015	100	850	850	4x11	2625
1000	1100	3HT1000	1820	1080	2090	1700	1200	2015	100	850	850	4x11	3125
1250	1380	3HT1250	2200	1080	2355	2080	1200	2265	100	850	850	4x11	3425
1600	1750	3HT1600	2200	1080	2355	2080	1200	2265	100	850	850	4x11	4150
2000	2200	3HT2000	2200	1080	2355	2080	1200	2265	100	850	850	4x11	5250

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