

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	315kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	315
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 700
17	Load loss at 75°C	W	≤ 3900
18	Total load loss at normal ratio at 75°C	W	≤ 4600
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.95
	- 0.8 power factor lagging of 100% load factor	%	98.56
20	Impedance	%	4
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	250
33	Acoustic sound level	dB	≤ 65
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1100
	- Dept	mm	750
	- Height	mm	1200
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1200
	- Dept	mm	850
	- Height	mm	1400
37	Weight of fully assembled transformer (Approx.)	kg	1200

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	400kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	400
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 850
17	Load loss at 75°C	W	≤ 4600
18	Total load loss at normal ratio at 75°C	W	≤ 5450
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.78
	- 0.8 power factor lagging of 100% load factor	%	98.50
20	Impedance	%	4
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	280
33	Acoustic sound level	dB	≤ 66
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1150
	- Dept	mm	750
	- Height	mm	1200
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1250
	- Dept	mm	850
	- Height	mm	1400
37	Weight of fully assembled transformer (Approx.)	kg	1300

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	500kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	500
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 1150
17	Load loss at 75°C	W	≤ 6000
18	Total load loss at normal ratio at 75°C	W	≤ 7750
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.89
	- 0.8 power factor lagging of 100% load factor	%	98.47
20	Impedance	%	4
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	320
33	Acoustic sound level	dB	≤ 66
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1400
	- Dept	mm	900
	- Height	mm	1250
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1500
	- Dept	mm	1000
	- Height	mm	1450
37	Weight of fully assembled transformer (Approx.)	kg	1600

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	630kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	630
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 1350
17	Load loss at 75°C	W	≤ 8500
18	Total load loss at normal ratio at 75°C	W	≤ 9850
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.91
	- 0.8 power factor lagging of 100% load factor	%	98.46
20	Impedance	%	4
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	360
33	Acoustic sound level	dB	≤ 66
34	Exterior finish		Zinc Phosphates Treatment with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1450
	- Dept	mm	900
	- Height	mm	1300
36	Dimension of wooden packing (Approx.):		
	- Width	mm	1550
	- Dept	mm	1000
	- Height	mm	1500
37	Weight of fully assembled transformer (Approx.)	kg	1800

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	800kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	800
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 1450
17	Load loss at 75°C	W	≤ 12000
18	Total load loss at normal ratio at 75°C	W	≤ 13450
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.90
	- 0.8 power factor lagging of 100% load factor	%	98.35
20	Impedance	%	6
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	400
33	Acoustic sound level	dB	≤ 67
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1550
	- Dept	mm	900
	- Height	mm	1300
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1650
	- Dept	mm	1000
	- Height	mm	1500
37	Weight of fully assembled transformer (Approx.)	kg	2000

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	1000kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	1000
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		$\pm 2 \times 2.5\%$ (5 positions) or $+1/-3 \times 3.5\%$ (5 positions) or (Optional upon request)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤ 1600
17	Load loss at 75°C	W	≤ 13500
18	Total load loss at normal ratio at 75°C	W	≤ 15100
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	99.02
	- 0.8 power factor lagging of 100% load factor	%	98.51
20	Impedance	%	6
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	655
33	Acoustic sound level	dB	≤ 67
34	Exterior finish		Zinc Phosphates Treatment with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1750
	- Dept	mm	1150
	- Height	mm	1300
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1850
	- Dept	mm	1250
	- Height	mm	1500
37	Weight of fully assembled transformer (Approx.)	kg	2500

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	1250kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	1250
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		±2 x 2.5% (5 positions)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤1800
17	Load loss at 75°C	W	≤16000
18	Total load loss at normal ratio at 75°C	W	≤17800
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.60
	- 0.8 power factor lagging of 100% load factor	%	98.35
20	Impedance	%	6
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	815
33	Acoustic sound level	dB	≤67
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1140
	- Dept	mm	1820
	- Height	mm	1735
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	1920
	- Dept	mm	1330
	- Height	mm	1950
37	Weight of fully assembled transformer (Approx.)	kg	3750

Technical Data of Three Phase Distribution Transformers			
No.	Description	Unit	1500kVA
1	Manufacturer		Precise Electric Manufacturing Co., Ltd.
2	Type		Sealed Type
3	No. of phase		3
4	Standard		IEC 60076
5	Continuous rates output	kVA	1500
6	Nominal ratio transformation at no-load		95.26
7	Polarity		Dyn11
8	Rated frequency	Hz.	50
9	Voltage Ratio under voltage	V	22000-400/230
10	Type of tap changer		off-voltage
11	Total range of transformation ratio (on 22kV) at full load		±2 x 2.5% (5 positions)
12	Impulse withstand voltage of HV winding	kV	125
13	Impulse withstand voltage of LV winding	kV	30
14	Maximum flux density of core		< 1.75
15	Maximum flux density of Yoke		< 1.75
16	No-load loss	W	≤2100
17	Load loss at 75°C	W	≤19000
18	Total load loss at normal ratio at 75°C	W	≤21100
19	Efficiency at normal ratio at - unity power factor of 100% load factor	%	98.61
	- 0.8 power factor lagging of 100% load factor	%	98.35
20	Impedance	%	6
21	Transformer type (Indoor/Outdoor)		Outdoor
22	Type of cooling		ONAN
23	Insulation		Insulating Paper and Transformer oil (Non PCB)
24	Hermetically		Yes
25	MV bushing type		Outdoor plug in 200 A or Outdoor Porcelain Bushing (Optional upon request)
26	LV bushing type		Outdoor Porcelain Bushing
27	Ambient maximum temperature rise	°C	45
28	Winding temperature rise (maximum)	K	65
29	Oil temperature rise (maximum)	K	60
30	Type of HV winding		Copper Cylindrical Layer Winding
31	Type of LV winding		Copper Cylindrical Layer Winding
32	Total oil required (Approx.)	Litre	885
33	Acoustic sound level	dB	≤67
34	Exterior finish		Zinc Phosphates Treatmetn with Two Layer Painting
35	Dimension of fully assembled Transformer (Approx.):		
	- Width	mm	1130
	- Dept	mm	2040
	- Height	mm	1865
36	Dimension of wooden packing (Approx.) :		
	- Width	mm	2240
	- Dept	mm	1340
	- Height	mm	2100
37	Weight of fully assembled transformer (Approx.)	kg	3920