

# Distribution Dry Type Transformers

## 600 Volts Class — Single and Three Phase

Selection

### 600 Volts Class

Single Phase 0.25–167 KVA

Three Phase 3–1000 KVA

### Features

- Standard units are UL listed and are designed in accordance with ANSI, NEMA (ST20) and IEEE standards

### Encapsulated

- UL listed designs (UL 506)
- Totally enclosed, non-ventilated, heavy gauge steel enclosure
- Core and coil completely embedded within a resin compound for quiet, low temperature operation
- Encapsulation seals out moisture and air
- UL listed indoor/outdoor enclosure features integral wall mounting brackets
- Rugged design resists weather, dust, and corrosion
- Efficient, compact, lightweight, easy to install
- Flexible wiring leads that terminate within the bottom wiring compartment
- Large wiring compartment on the bottom with convenient knockouts
- High quality non-aging electrical grade core steel
- Precision wound coils

### Ventilated

- UL listed designs (UL 1561)
- Designed for indoor NEMA 2 installations. NEMA 3R enclosures suitable for outdoor locations available as an option
- Core and coils are designed with UL listed high-temperature materials rated for 220°C; standard units feature 150°C winding temperature rise
- Optional low temperature rise of 115°C or 80°C winding temperature rise for increased efficiency and additional overload capability
- Rugged sheet steel enclosure per UL1561, UL506 standards with removable panels for access to the internal wiring area
- Neoprene noise dampening pads isolate the core and coil from the enclosure
- Optional drip shields/weathershield and wall brackets available
- High quality, non-aging electrical grade core steel
- Precision wound coils



Encapsulated Transformer



Ventilated Transformer

### Single Phase Transformer Ampere Ratings

Single Phase Full Load Amperes (FLC)						
KVA	120V	208V	240V	277V	480V	600V
.25	2.0	1.2	1.0	0.9	0.5	0.4
.50	4.2	2.4	2.1	1.8	1.0	0.8
.75	6.3	3.6	3.1	2.7	1.6	1.3
1	8.3	4.8	4.2	3.6	2.1	1.7
1.5	12.5	7.2	6.2	5.4	3.1	2.5
2	16.7	9.6	8.3	7.2	4.2	3.3
3	25	14.4	12.5	10.8	6.2	5
5	41	24	20.8	18.0	10.4	8.3
7.5	62	36	31	27	15.6	12.5
10	83	48	41	36	20.8	16.7
15	125	72	62	54	31	25
25	206	120	104	90	52	41
37.5	312	180	156	135	76	62
50	416	240	208	180	104	83
75	625	340	312	270	156	125
100	833	480	416	361	208	166
167	1391	803	695	603	347	278

### Three Phase Transformer Ampere Ratings

Three Phase Full Load Amperes (FLC)				
KVA	208V	240V	480V	600V
3	8.3	7.2	3.6	2.9
6	16.6	14.4	7.2	5.8
9	25	21.6	10.8	8.6
15	41.7	36.1	18.0	14.4
30	83.4	72.3	36.1	28.9
45	124	108	54.2	43.4
75	208	180	90	72
112.5	312	270	135	108
150	416	360	180	144
225	624	541	270	216
300	832	721	360	288
500	1387	1202	601	481
750	2084	1806	903	723
1000	2779	2408	1204	963

### Insulation Class and Temperature Rise

KVA		Insulation		Temperature Rise
1-Phase	3-Phase	NEMA Class <sup>®</sup>	Temperature Class	
0.25–25 <sup>①</sup>	3–15	F	180° C	115° C
15–167	15–1000	H	220° C	150° C

### Sound Level in Decibels<sup>®</sup> — 600V Class

KVA	NEMA Average dB	KVA	NEMA Average dB
0–9	40	301–500	60
10–50	45	501–700	62
51–150	50	701–1000	64
151–300	55		

① 25KVA 277 -120/240 is 115°C rise. 25KVA 480 x 240 -120/240 is 150°C rise.

② Average sound level applies to 150°C rise K-1 transformers. Average dB levels for low temperature and other K-Factor ratings available upon request.

③ NEMA Class for 80°C rise = B, 115°C rise = F, 150°C = H. Insulation class per UL 1446 180° = (H), 220° = (R)