

Isolating transformer TT3



General Data

Rated input voltage 3 x 400 Vac
Rated output voltage 3 x 400 Vac
Rated power 10000 - 30000 VA
Insulation class F
Maximum ambient temperature 50 °C
Efficiency up to 97.5 %
Degree of protection IP 00 or IP 23
Optionally adapted package for higher degrees of protection

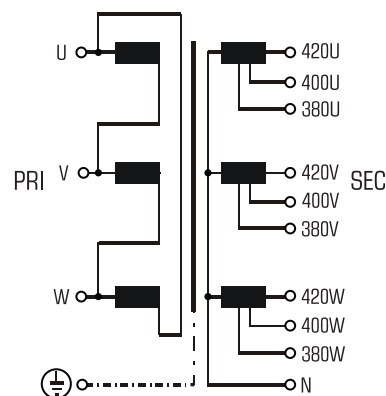
Advantages

Safe galvanic isolation
Patented assembly technology to lower heat losses
Very good corrosion protection and low noise thanks to vacuum impregnation
Secondary side $\pm 5\%$ % tapings for voltage adjustment
Fixed, contact protected screw connection terminals complying with UVV BGV A3
Multifunctional fixing rails with 12 oval slots
Enlarged fixing rail for easy installation from above
Integrated crane eyes

Applications

Isolating transformer for the safe electrical isolation of the input and output sides. The transformer may be used to set up protective separation as a protective measure in accordance with VDE 0100.

Sample application



Standards



Isolating transformer
to: VDE 0570 Part2-4, DIN EN 61558-2-4, EN 61558-2-4, IEC 61558-2-4, UL 5085-1/-2, CSA 22.2 No.66

Approvals



UL 5085, UL 1561, CSA 22.2 (E 103521)



Isolating transformer TT3

Typ	TT3 1-4-4	TT3 2,5-4-4	TT3 2,5-69-4	TT3 5-4-4	TT3 6,3-4-4	TT3 8-4-4
Electrical data						
Input						
Rated input voltage	3 x 400 Vac	3 x 400 Vac	3 x 690 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
Rated Power	1000 VA	2500 VA	2500 VA	5000 VA	6300 VA	8000 VA
Rated current	3 x 1.52 Aac (3 x 380 Vac) 3 x 1.44 Aac (3 x 400 Vac) 3 x 1.38 Aac (3 x 420 Vac)	3 x 3.8 Aac (3 x 380 Vac) 3 x 3.7 Aac (3 x 400 Vac) 3 x 3.5 Aac (3 x 420 Vac)	3 x 3.8 Aac (3 x 380 Vac) 3 x 3.7 Aac (3 x 400 Vac) 3 x 3.5 Aac (3 x 420 Vac)	3 x 7.6 Aac (3 x 380 Vac) 3 x 7.2 Aac (3 x 400 Vac) 3 x 6.9 Aac (3 x 420 Vac)	3 x 9.6 Aac (3 x 380 Vac) 3 x 9.1 Aac (3 x 400 Vac) 3 x 8.6 Aac (3 x 420 Vac)	3 x 12.2 Aac (3 x 380 Vac) 3 x 11.5 Aac (3 x 400 Vac) 3 x 11 Aac (3 x 420 Vac)
Short circuit voltage	6.4 %	3.7 %	3.8 %	3.6 %	2.8 %	2.2 %
Power loss	92.0 W	155.0 W	155.0 W	275.0 W	290.0 W	320.0 W
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
Efficiency	91.5 %	94.3 %	94.3 %	94.7 %	95.5 %	96 %
Approvals						
Approvals	cURus	cURus	-	cURus	cURus	cURus
Environment						
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C	50 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	VDE=F, UL=class 155	VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Order numbers						
Recommended enclosure	BGUK 20	BGE-050	BGE-050	BGE-065	BGE-065	BGE-065
Order Number	TT3 1-4-4	TT3 2,5-4-4	TT3 2,5-69-4	TT3 5-4-4	TT3 6,3-4-4	TT3 8-4-4



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Typ	TT3 10-4-4	TT3 10-69-4	TT3 12,5-4-4	TT3 16-4-4	TT3 20-4-4	TT3 20-69-4
Electrical data						
Input						
Rated input voltage	3 x 400 Vac	3 x 690 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 690 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output						
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
Rated Power	10000 VA	10000 VA	12,500 VA	16000 VA	20000 VA	20000 VA
Rated current	3 x 15.1 Aac (3 x 380 Vac) 3 x 14.4 Aac (3 x 400 Vac) 3 x 13.8 Aac (3 x 420 Vac)	3 x 15.1 Aac (3 x 380 Vac) 3 x 14.4 Aac (3 x 400 Vac) 3 x 13.8 Aac (3 x 420 Vac)	3 x 19 Aac (3 x 380 Vac) 3 x 18 Aac (3 x 400 Vac) 3 x 17.2 Aac (3 x 420 Vac)	3 x 24.4 Aac (3 x 380 Vac) 3 x 23.1 Aac (3 x 400 Vac) 3 x 22 Aac (3 x 420 Vac)	3 x 30.4 Aac (3 x 380 Vac) 3 x 28.9 Aac (3 x 400 Vac) 3 x 27.5 Aac (3 x 420 Vac)	3 x 38.1 Aac (3 x 380 Vac) 3 x 36.1 Aac (3 x 400 Vac) 3 x 34.4 Aac (3 x 420 Vac)
Short circuit voltage	1.9 %	2.0 %	1.65 %	1.5 %	1.5 %	1.9 %
Power loss	350.0 W	350.0 W	380.0 W	500.0 W	525.0 W	632.0 W
Vector group	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5	Dyn 5
Efficiency	96.5 %	97.5 %	97 %	97 %	97.5 %	97.5 %
Approvals						
Approvals	cURus	-	cURus	cURus	cURus	-
Environment						
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C	50 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155	VDE=F, UL=class 155
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Order numbers						
Recommended enclosure				BGE-080	BGE-080	BGE-080
Order Number	TT3 10-4-4	TT3 10-69-4	TT3 12,5-4-4	TT3 16-4-4	TT3 20-4-4	TT3 20-69-4



Isolating transformer TT3

Typ	TT3 25-4-4	TT3 25-69-4	TT3 30-4-4
Electrical data			
Input			
Rated input voltage	3 x 400 Vac	3 x 690 Vac	3 x 400 Vac
Frequency range	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Output			
Rated output voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Tappings Output (±)	±5 %	±5 %	±5 %
Rated Power	25000 VA	25000 VA	30000 VA
Rated current	3 x 38.1 Aac (3 x 380 Vac) 3 x 36.1 Aac (3 x 400 Vac) 3 x 34.4 Aac (3 x 420 Vac)	3 x 38.1 Aac (3 x 380 Vac) 3 x 36.1 Aac (3 x 400 Vac) 3 x 34.4 Aac (3 x 420 Vac)	3 x 45.7 Aac (3 x 380 Vac) 3 x 43.3 Aac (3 x 400 Vac) 3 x 41.3 Aac (3 x 420 Vac)
Short circuit voltage	1.2 %	1.2 %	1.7 %
Power loss	604.0 W	624.0 W	770.0 W
Vector group	Dyn 5	Dyn 5	Dyn 5
Efficiency	97.5 %	97.5 %	97.5 %
Approvals			
Approvals	cURus	-	cURus
Environment			
Ambient temperature max.	50 °C	50 °C	50 °C
Safety and protection			
Type	Open type	Open type	Open type
Insulation class	VDE=F, UL=class 155	F (155°C)	VDE=F, UL=class 155
Protection index	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I
Short circuit strength	non-short-circuit proof	non-short-circuit proof	non-short-circuit proof
Order numbers			
Recommended enclosure	BGE-080	BGE-080	BGE-080
Order Number	TT3 25-4-4	TT3 25-69-4	TT3 30-4-4



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Typ	Terminals	Fixing method	Fixing screws	Weight	Core type	Dimension picture (in mm)	A	B	C	D	d1	d2	E	e1	e2	F	G	H	I	J	K	L
							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TT3 1-4-4	Screw-type terminal	Fixing rail	M6	15.00 kg	3UI 114/40	1	267	125	215	176	180	249	71	79	98	-	-	-	-	-	-	-
TT3 2,5-4-4	Screw-type terminal	Fixing rail	M8	32.00 kg	3UI 132/72	1	315	165	250	200	215	292	102	124	126	-	-	-	-	-	-	-
TT3 2,5-69-4	Screw-type terminal	Fixing rail	M8	29.00 kg	3UI 132/72	1	315	165	250	200	215	292	102	124	126	-	-	-	-	-	-	-
TT3 5-4-4	Screw-type terminal	Fixing rail	M8	48.00 kg	3UI 180/63	1	410	155	355	264	310	388	125	125	115	-	-	-	-	-	-	-
TT3 6,3-4-4	Screw-type terminal	Fixing rail	M8	55.00 kg	3UI 180/63	1	410	175	360	264	310	388	125	125	115	-	-	-	-	-	-	-
TT3 8-4-4	Screw-type terminal	Fixing rail	M8	67.00 kg	3UI 180/78	1	410	180	360	264	310	388	140	140	130	-	-	-	-	-	-	-
TT3 10-4-4	Screw-type terminal	Fixing rail	M10	87.00 kg	3UI 210/73	1	480	192	400	316	370	450	143	151	133	-	-	-	-	-	-	-
TT3 10-69-4	Screw-type terminal	Fixing rail	M10	87.00 kg	3UI 240/140	1	480	192	400	316	370	450	143	151	133	-	-	-	-	-	-	-
TT3 12,5-4-4	Screw-type terminal	Fixing rail	M10	115.00 kg	3UI 210/103	1	480	222	400	316	370	450	173	181	163	-	-	-	-	-	-	-
TT3 16-4-4	Screw-type terminal	Fixing rail	M12	150.00 kg	3UI 240/110	1	550	267	510	356	430	516	184	210	182	-	-	-	-	-	-	-
TT3 20-4-4	Screw-type terminal	Fixing rail	M12	180.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-
TT3 20-69-4	Screw-type terminal	Fixing rail	M12	180.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-
TT3 25-4-4	Screw-type terminal	Fixing rail	M12	205.00 kg	3UI 240/140	1	550	297	510	356	430	516	214	240	212	-	-	-	-	-	-	-
TT3 25-69-4	Screw-type terminal	Fixing rail	M12	218.00 kg	3UI 240/140	1	550	300	510	356	430	516	214	240	212	-	-	-	-	-	-	-
TT3 30-4-4	Screw-type terminal	Fixing rail	M12	230.00 kg	3UI 240/170	2	550	320	480	356	430	516	244	270	242	-	-	-	-	-	-	-

Dimension pictures

