

Variable Transformers
Series 5000 • 28.0 to 252.0 Amperes



5000 Series

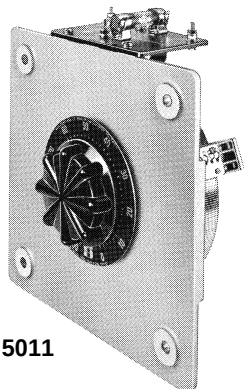
The 5011/5021 Series Variable transformers are designed to control large KVA requirements. The 5011 operates on 120 volts and is rated for constant current of 50 amperes. The 5021 operates on 240 volts and constant current of 28 amperes. The 5011 Series units have coil tapping arrangements allowing output voltage from 0-117% of line voltage, while the 5021 Series allows output voltage from 0 to line voltage or 17% above line voltage. They can be operated at frequencies between 50 and 400 Hertz with a rating at higher than rated frequency.

Adjustable shaft design on manually operated models permits back-of-panel or bench mounting. Terminals are 1/4" screw type. For single and two ganged units, case styles are available in either "C" style, which encloses only the coil, or the "CT" style,

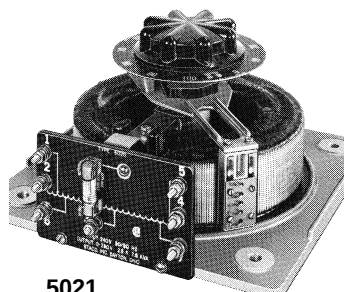
which provides protective housing for both the coil and terminal board. Knockouts are provided in the terminal board housing to accommodate conduit or cable connections. For three ganged and above, we offer our Nema 1, dripproof, fully front accessible "E" enclosure.

Motor-driven models are available from single thru 27 ganged assemblies; cased or uncased (identified with the prefix "M" in the part number). The synchronous motor is designed for operation on 120 volt, 50/60 Hertz, single phase lines and draws approximately 0.3 amperes. To meet a wide range of application requirements, standard motor speeds of 5, 15, 30 and 60 seconds are available depending upon the size of the variable transformer.

PART NUMBER		WIRING	INPUT		OUTPUT			SHAFT ROTATION FOR VOLTAGE INCREASE	TERMINAL CONNECTIONS For Increasing Voltage As Viewed from Rotor End		SCHE- MATIC (Pg 8 & 9)	NET WEIGHT IN LBS. (MAX)	
MANUALLY OPERATED	MOTOR DRIVEN		VOLTS	HERTZ	VOLTS	MAX AMPS	MAX KVA		INPUT	OUTPUT		MAN- UAL	MOTOR DRIVEN
5011 5011C 5011CT	M5011 M5011C M5011CT	Single Phase	120	50/60	0-140	50	7.0	CW	1-2	1-3	18	57	78
5021 5021C 5021CT	M5021 M5021C M5021CT	Single Phase	240	50/60	0-240	28	6.7	CW	2-4	2-3	19	57	78
					0-280	28	7.8	CCW	4-2	4-3			
			120	50/60	0-280	28*-12 VD	3.4‡	CW	2-5	2-3			
								CCW	4-1	4-3			
								CW	2-6	2-3			
								CCW	4-7	4-3			
5011-2D 5011C-2D 5011CT-2D	M5011-2D M5011C-2D M5011CT-2D	Three Phase Open Delta	120	50/60	0-140	50	12.1	CW	2-1-2	3-1-3	20 & 5	134	155
5011-2P 5011C-2P 5011CT-2P	M5011-2P M5011C-2P M5011CT-2P	Single Phase Parallel	120	50/60	0-140	100	14.0	CW	1-2	1-B	21	136	157
5011-2S 5011C-2S 5011CT-2S	M5011-2S M5011C-2S M5011CT-2S	Single Phase Series	240	50/60	0-280	50	14.0	CW	2-2	3-3	20 & 4	134	155
5021-2D 5021C-2D 5021CT-2D	M5021-2D M5021C-2D M5021CT-2D	Three Phase Open Delta	240	50/60	0-240	28	11.6	CW	4-1-4	3-1-3	20 & 5	134	155
					0-280	28	13.6	CW	2-1-2	3-1-3			
			120	50/60	0-280	28*-12 V.D.	5.8‡	CW	5-1-5	3-1-3			
5021-2P 5021C-2P 5021CT-2P	M5021-2P M5021C-2P M5021CT-2P	Single Phase Parallel	240	50/60	0-240	56	13.4	CW	1-4	1-B	21	136	157
					0-280	56	15.7	CW	1-2	1-B			
			120	50/60	0-280	56*-24 V.D.	6.8‡	CW	1-5	1-B			
5021-2S 5021C-2S 5021CT-2S	M5021-2S M5021C-2S M5021CT-2S	Single Phase Series	480	50/60	0-480	28	13.5	CW	4-4	3-3	20 & 4	134	155
					0-560	28	15.7	CW	2-2	3-3			
			240	50/60	0-560	28*-12 V.D.	6.8‡	CW	5-5	3-3			
5011-3P 5011E-3P	M5011-3P M5011E-3P	Single Phase Parallel	120	50/60	0-140	150	21.0	CW	1-2	1-D	22	216	237
5011-3Y 5011E-3Y	M5011-3Y M5011E-3Y	Three Phase Wye	240	60	0-280	50	24.2	CW	2-2-2	3-3-3	20 & 6	212	233



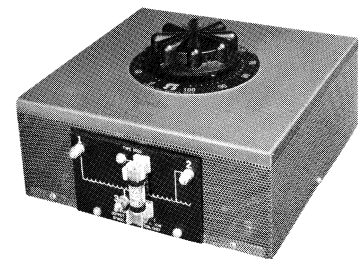
5011



5021



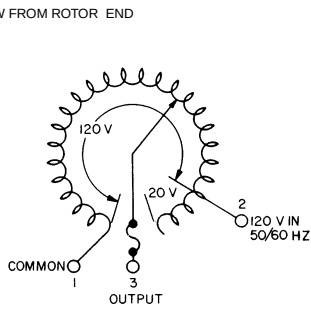
5021CT-2



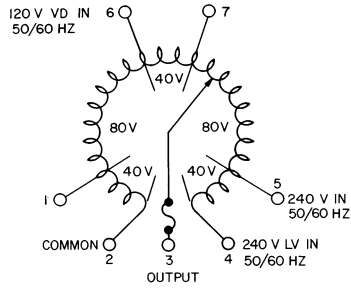
5011C

5000 Series

VIEW FROM ROTOR END

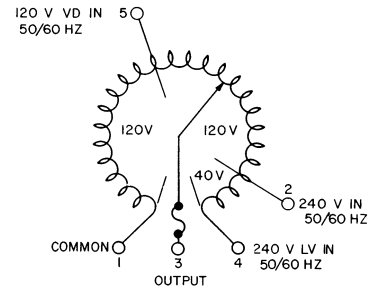


5011



For opposite rotation interchange external connections from 5 to 1, 2 to 4 and 6 to 7.

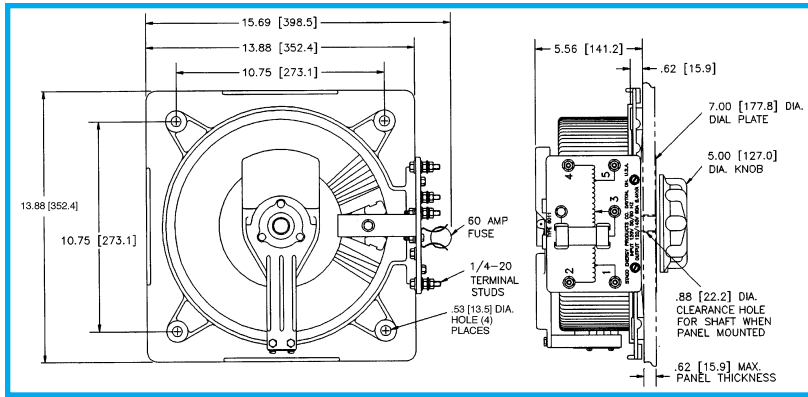
5021 Single Unit



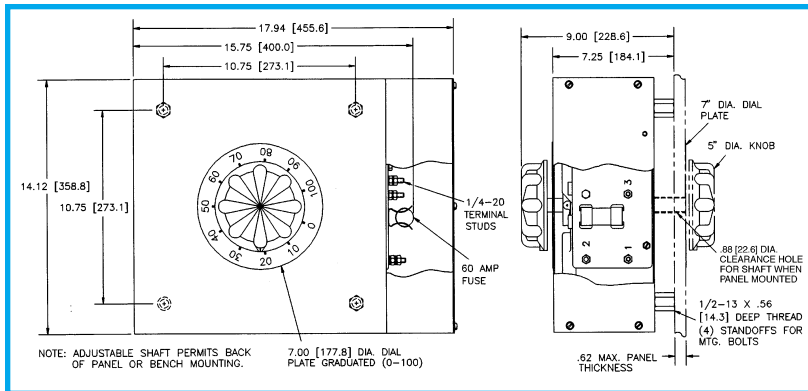
5021 Ganged Unit

PART NUMBER		WIRING	INPUT		OUTPUT			SHAFT ROTATION FOR VOLTAGE INCREASE	TERMINAL CONNECTIONS For Increasing Voltage As Viewed from Rotor End		SCHE- MATIC (Pg 8 & 9)	NET WEIGHT IN LBS. (MAX)	
MANUALLY OPERATED	MOTOR DRIVEN		VOLTS	HERTZ	VOLTS	MAX AMPS	MAX KVA		INPUT	OUTPUT		MAN- UAL	MOTOR DRIVEN
5021-3P 5021E-3P	M5021-3P M5021E-3P	Single Phase Parallel	240	50/60	0-240 0-280	84 84	20.2 23.5	CW CW	1-4 1-2	1-D 1-D	22	216	237
			120	50/60	0-280	84*36 V.D.	10.2†	CW	1-5	1-D			
5021-3Y 5021E-3Y	M5021-3Y M5021E-3Y	Three Phase Wye	480	50/60 60	0-480 0-560	28 28	23.3 27.2	CW CW	4-4-4 2-2-2	3-3-3 3-3-3	20 & 6	212	233
			240	60	0-560	28*12 V.D.	11.8†	CW	5-5-5	3-3-3			
5011-4D 5011E-4D	M5011-4D M5011E-4D	Three Phase Open Delta	120	50/60	0-140	100	24.2	CW	2-1-2	B-1-B	21 & 5	314	335
5011-4P 5011E-4P	M5011-4P M5011E-4P	Single Phase Parallel	120	50/60	0-140	200	28.0	CW	1-2	1-D	22	316	337
5011-4PS 5011E-4PS	M5011-4PS M5011E-4PS	Single Phase Series Parallel	240	50/60	0-280	100	28.0	CW	2-2	B-B	21 & 4	314	335
5021-4D 5021E-4D	M5021-4D M5021E-4D	Three Phase Open Delta	240	50/60	0-240 0-280	56 56	23.3 27.2	CW CW	4-1-4 2-1-2	B-1-B B-1-B	21 & 5	314	335
			120	50/60	0-280	56*24 V.D.	11.8†	CW	5-1-5	B-1-B			
5021-4P 5021E-4P	M5021-4P M5021E-4P	Single Phase Parallel	240	50/60	0-240 0-280	112 112	26.9 31.4	CW CW	1-4 1-2	1-D 1-D	22	316	337
			120	50/60	0-280	112*48 V.D.	13.5†	CW	1-5	1-D			
5021-4PS 5021E-4PS	M5021-4PS M5021E-4PS	Single Phase Series	480	50/60	0-480 0-560	56 56	26.9 31.4	CW CW	4-4 2-2	B-B B-B	21 & 4	314	335
			240	50/60	0-560	56*24 V.D.	13.5†	CW	5-5	B-B			
5011-5P 5011E-5P	M5011-5P M5011E-5P	Single Phase Parallel	120	50/60	0-140	250	35.0	CW	1-2	1-D	22	400	420
5011-6D 5011E-6D	M5011-6D M5011E-6D	Three Phase Open Delta	120	50/60	0-140	150	36.4	CW	2-1-2	D-1-D	22 & 5	481	502
5011-6P 5011E-6P	M5011-6P M5011E-6P	Single Phase Parallel	120	50/60	0-140	300	42.0	CW	1-2	1-D	22	483	504
5011-6PS 5011E-6PS	M5011-6PS M5011E-6PS	Single Phase Series Parallel	240	50/60	0-280	150	42.0	CW	2-2	D-D	22 & 4	481	502
5011-6Y 5011E-6Y	M5011-6Y M5011E-6Y	Three Phase Wye	240	60	0-280	100	48.5	CW	2-2-2	B-B-B	21 & 6	479	500

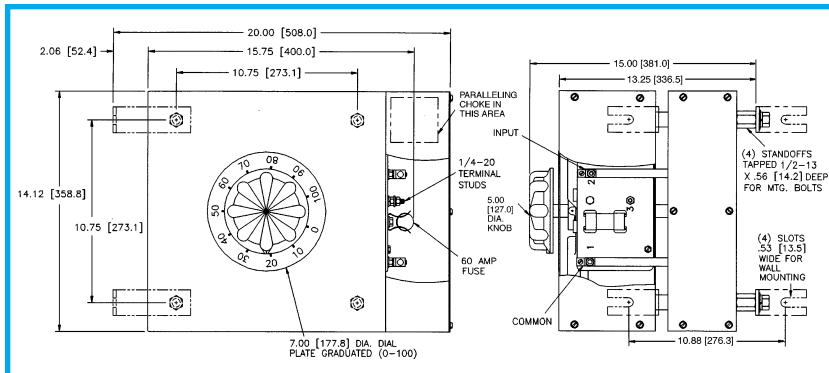
5000/6000 Series



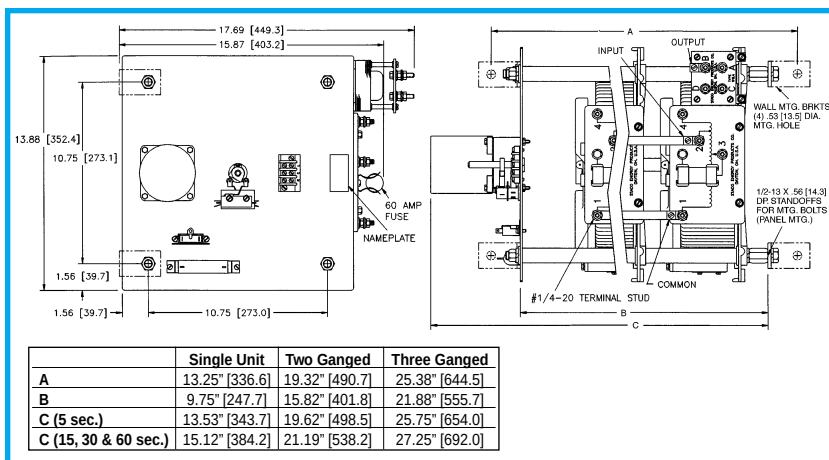
Manual Single, Uncased



Manual Single, Cased

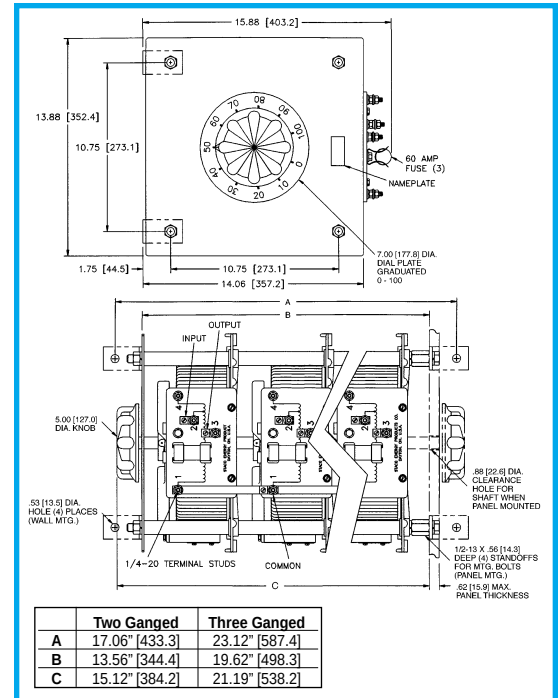


Manual Two-Ganged, Cased

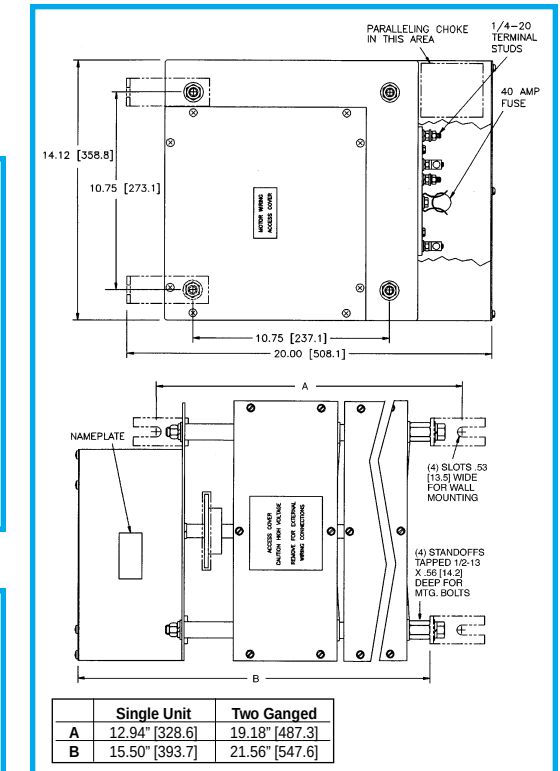


	Single Unit	Two Ganged	Three Ganged
A	13.25" [336.6]	19.32" [490.7]	25.38" [644.5]
B	9.75" [247.7]	15.82" [401.8]	21.88" [555.7]
C (5 sec.)	13.53" [343.7]	19.62" [498.5]	25.75" [654.0]
C (15, 30 & 60 sec.)	15.12" [384.2]	21.19" [538.2]	27.25" [692.0]

Motor Driven, Single, Two and Three-Ganged, Uncased



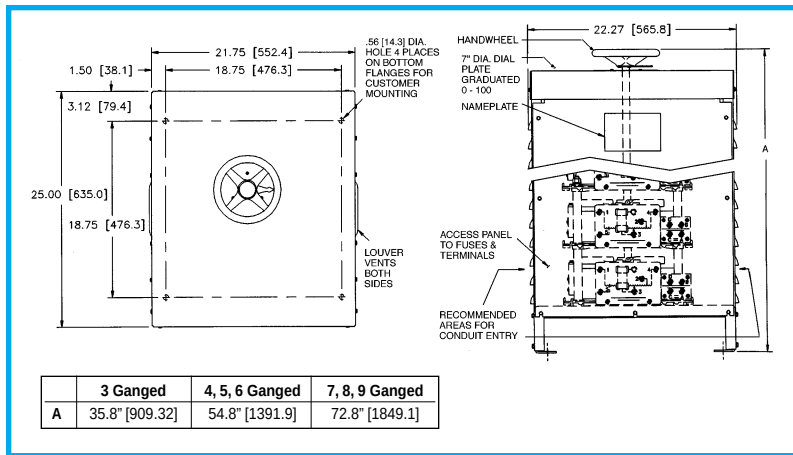
Manual Two and Three-Ganged, Uncased



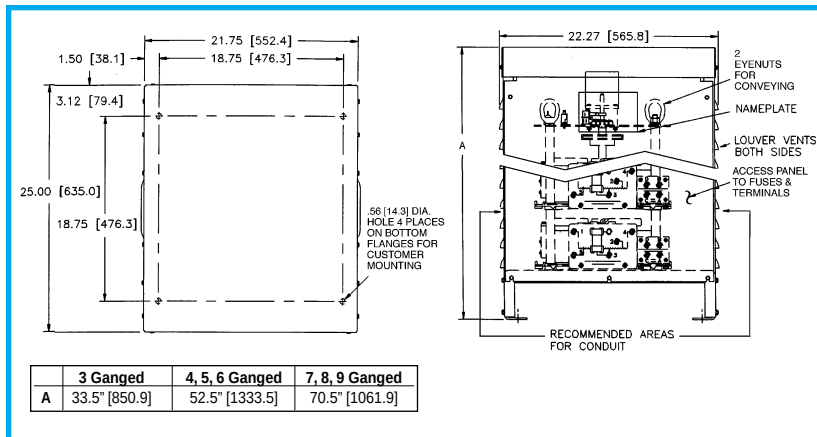
Motor Driven, Single and Two-Ganged, Cased

	Single Unit	Two Ganged
A	12.94" [328.6]	19.18" [487.3]
B	15.50" [393.7]	21.56" [547.6]

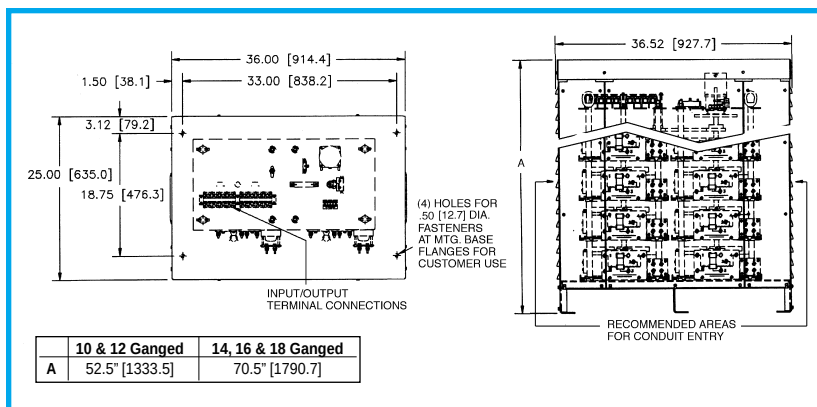
5000/6000 Series



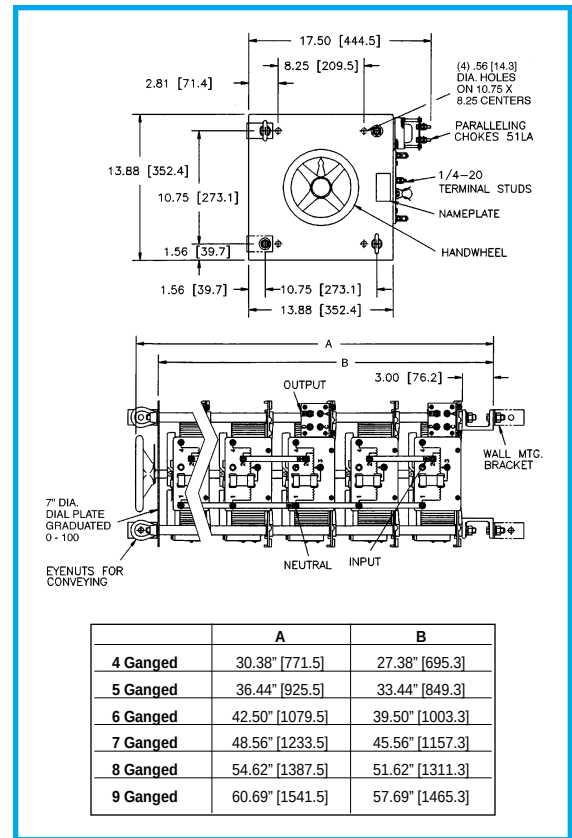
Manual Three to Nine-Ganged, Cased



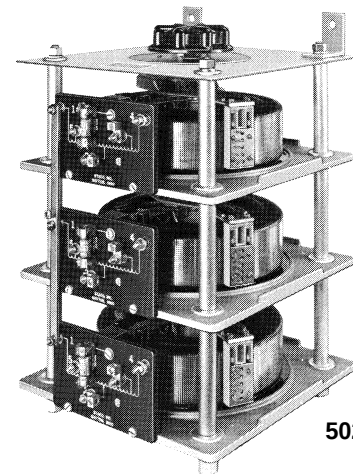
Motor-Driven Three to Nine-Ganged, Cased



Motor-Driven 10, 12, 14, 16 & 18-Ganged Open Delta and Parallel, Cased



Manual Four to Nine-Ganged, Uncased



5021-3Y