

Control, safety and circuit isolation transformers (continued)

single-phase

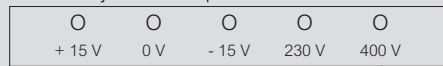
Characteristics

Single - phase 50-60 Hz - class I

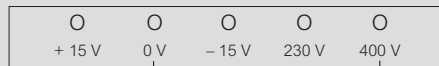
Insulation voltage between windings: 4 510 V

Max. ambient operating temperature without derating: 50 °C

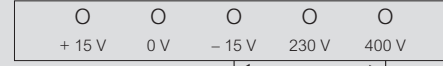
Use of adjustment taps



Connected to mains supply (U₁) between terminals + 15 V and 230 or 400 V

1) If U₁ > 230 or 400 V2) If I₂ < I_{2n} (if load is lower than rated load, the secondary voltage must be reduced)

Connected to mains supply (U₁) between terminals 0 V and 230 or 400 V

If U₁ = 230 or 400 V with a load I₂ = I_{2n}

Connected to mains supply (U₁) between terminals - 15 V and 230 or 400 V

If U₁ < 230 or 400 V with a load I₂ = I_{2n}

Transformer sizing

P inrush = 0.8 (Σ P_m + Σ P_r + P_a)Σ P_m = Sum of all contactors holding powersΣ P_r = Sum of all indicators light powersP_a = Inrush power of the largest contactor

Cat.Nos	Power (VA)	Admissible instantaneous power (VA) at cos φ of:									No-load loss (W)	Loss at rated voltage ¹⁾ (W)	Voltage drop (%) with cos φ of:			Efficiency (%) with cos φ of:			Ucc (%)	Connection			
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1			0.3	0.6	1	0.3	0.6	1		Primary cable (mm²)		Secondary cable (mm²)	
																				flexible	rigid	flexible	rigid
Control and safety: Primary 230 V - Secondary 24 V																							
0 442 01/11	40	62	57	53	50	48	47	46	47	58	3.9	7.5	8.9	10.8	8.9	62.0	76.0	84.0	10.3	1 to 4	1 to 4	1 to 4	1 to 4
0 442 02/12	63	110	100	94	88	83	80	78	78	91	6.0	14.3	7.6	9.5	8.6	57.0	73.0	81.0	9.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 03/13	100	230	210	180	170	150	140	140	130	150	8.2	17.9	6.3	8.6	9.2	63.0	77.0	85.0	8.5	1 to 4	1 to 4	1 to 4	1 to 4
0 442 04/14	160	340	300	270	250	230	220	210	210	230	11.2	25.0	5.9	7.8	7.9	66.0	79.0	86.0	7.4	1 to 4	1 to 4	1 to 4	1 to 4
0 442 05/15	250	550	490	450	420	400	380	370	370	430	14.9	31.6	5.2	6.6	6.2	70.0	83.0	89.0	6.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 06/16	400	1600	1200	1000	850	740	650	590	540	510	18.3	46.3	2.2	3.8	5.6	72.0	84.0	90.0	4.2	1 to 4	1 to 4	1 to 4	1 to 4
0 442 17	630	2700	2200	1800	1500	1300	1200	1100	1000	1000	24.1	58.0	2.0	3.3	4.6	78.0	88.0	92.0	3.7	1 to 16	1 to 16	1 to 16	1 to 16
0 442 18	1000	3400	2800	2300	2000	1800	1600	1500	1400	1300	44.2	73.9	1.3	2.1	2.8	80.0	89.0	93.0	2.3	1 to 16	1 to 16	1 to 16	1 to 16
Control and safety: Primary 460 V - Secondary 24 V																							
0 442 41	40	69	63	58	55	52	50	49	49	58	3.9	7.5	8.1	10.0	8.8	61.6	76.3	84.3	9.7	1 to 4	1 to 4	1 to 4	1 to 4
0 442 42	63	120	110	98	90	85	81	78	78	89	6.0	11.7	7.0	9.0	8.6	61.8	76.4	84.4	8.8	1 to 4	1 to 4	1 to 4	1 to 4
0 442 43	100	210	180	170	150	140	140	130	130	150	8.2	17.8	7.1	9.2	9.2	62.7	77.1	84.9	8.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 44	160	390	340	300	270	250	230	220	220	230	11.2	24.8	5.3	7.2	7.8	65.9	79.4	86.6	7.0	1 to 4	1 to 4	1 to 4	1 to 4
0 442 45	250	540	490	450	420	400	380	370	370	440	14.9	31.2	5.2	6.6	6.0	70.6	82.8	88.9	6.0	1 to 4	1 to 4	1 to 4	1 to 4
0 442 46	400	1900	1400	1200	980	800	800	700	600	600	18.3	45.4	2.1	3.6	5.4	72.6	84.1	89.8	4.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 47	630	2200	1700	1400	1000	1000	900	800	800	700	25.5	58.0	2.3	4.0	4.7	70.0	82.4	88.6	3.8	1 to 4	1 to 4	1 to 10	1 to 10
0 442 48	1000	3400	2800	2300	2000	1800	1600	1500	1400	1300	44.2	73.6	1.3	2.1	2.8	80.3	89.1	93.1	2.3	1 to 16	1 to 16	1 to 16	1 to 16
0 442 49	1600	14300	12000	10300	9100	8200	7500	7000	6600	6800	65.5	93.7	1.0	1.5	1.9	83.7	91.1	94.5	1.6	2.5 to 10	1.5 to 16	4 to 16	1.5 to 25
0 442 50	2500	4300	3900	3600	3300	3100	3000	2900	2900	3400	86.5	141.0	1.8	2.2	2.0	84.2	91.4	94.7	1.9	4 to 16	1.5 to 25	4 to 35	2.5 to 50
Control and safety: Primary 230-400 V - Secondary 24-48 V																							
0 442 31	40	63	58	55	52	50	48	48	49	60	3.9	7.3	8.7	10.5	8.5	62.0	77.0	84.0	10.0	1 to 4	1 to 4	1 to 4	1 to 4
0 442 32	63	110	102	94	87	83	79	77	78	91	6.0	14.2	7.5	9.4	8.5	57.0	73.0	82.0	9.0	1 to 4	1 to 4	1 to 4	1 to 4
0 442 33	100	200	180	160	150	140	130	130	130	150	8.2	15.1	7.3	9.3	8.9	66.0	80.0	87.0	8.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 34	160	340	300	270	250	230	220	210	210	230	11.2	24.6	5.8	7.6	7.7	66.0	80.0	87.0	7.2	1 to 4	1 to 4	1 to 4	1 to 4
0 442 35	250	550	490	450	420	400	380	370	370	430	14.9	31.4	5.2	6.6	6.2	70.0	83.0	89.0	6.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 36	400	1400	1000	800	700	600	500	500	400	400	18.3	46.3	2.1	3.7	5.6	72.0	84.0	90.0	4.2	1 to 4	1 to 4	1 to 4	1 to 4
0 442 37	630	2700	2200	1900	1700	1500	1300	1200	1200	1200	24.1	58.0	2.0	3.0	3.9	79.0	88.0	93.0	3.3	1 to 16	1 to 16	1 to 16	1 to 16
0 442 38	1000	3400	2800	2300	2000	1800	1600	1500	1400	1300	44.2	74.4	1.3	1.9	2.9	80.0	89.0	93.0	2.4	1 to 16	1 to 16	1 to 16	1 to 16
0 442 39	1600	12800	10900	9500	8500	7700	7100	6700	6400	6600	65.5	94.7	1.1	1.6	1.9	84.0	91.0	94.0	1.7	2.5 to 10	1.5 to 16	4 to 16	1.5 to 25
0 442 40	2500	4300	3900	3600	3300	3100	3000	2900	2900	3400	86.5	143.4	1.8	2.2	2.0	84.0	91.0	95.0	1.9	4 to 16	1.5 to 25	4 to 35	2.5 to 50
Control and circuit isolation: Primary 230-400 V - Secondary 115-230 V																							
0 442 51/61	40	62	57	53	50	48	47	46	47	57	3.9	7.4	8.7	10.5	8.8	62.0	76.0	84.0	10.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 52/62	63	110	100	93	86	82	78	76	76	90	6.0	11.8	7.6	9.6	8.9	62.0	76.0	84.0	9.2	1 to 4	1 to 4	1 to 4	1 to 4
0 442 53/63	100	200	180	160	150	140	140	130	130	150	8.2	17.3	7.2	9.2	8.6	63.0	78.0	85.0	8.7	1 to 4	1 to 4	1 to 4	1 to 4
0 442 54/64	160	330	300	270	250	240	230	220	220	250	11.2	23.4	5.8	7.4	7.1	67.0	80.0	87.0	6.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 55/65	250	560	510	460	430	410	390	380	370	430	14.9	31.7	5.2	6.6	6.2	70.0	83.0	89.0	6.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 56/66	400	200	1600	1300	1100	900	840	760	700	660	18.3	43.9	2.1	3.6	5.2	73.0	85.0	90.0	4.1	1 to 4	1 to 4	1 to 4	1 to 4
0 442 67	630	2700	2200	1800	1600	1400	1200	1100	1000	1000	24.1	53.2	2.1	3.3	4.5	78.0	88.0	92.0	3.6	1 to 16	1 to 16	1 to 16	1 to 16
0 442 68	1000	3400	2800	2300	2000	1800	1600	1500	1400	1300	44.2	73.6	1.3	2.0	2.7	80.0	89.0	93.0	2.2	1 to 16	1 to 16	1 to 16	1 to 16
0 442 69	1600	8700	7500	6600	6100	5400	5000	4700	4500	4700	65.5	95.3	1.1	1.5	1.8	83.0	91.0	94.0	1.5	2.5 to 10	1.5 to 16	2.5 to 10	1.5 to 16
0 442 70	2500	9200	8300	7600	7100	6700	6300	6200	6100	7100	86.5	150.1	1.8	2.3	2.2	83.0	91.0	94.0	2.0	4 to 16	1.5 to 25	4 to 16	1.5 to 25
0 442 71	4000	16500	14300	12700	11400	10500	9800	9200	8900	9500	87.4	234.8	2.1	2.9	3.3	84.0	91.0	94.0	2.7	4 to 16	1.5 to 25	4 to 16	1.5 to 25
0 442 72	5000	28500	23400	19900	17500	15600	14200	13100	12300	12300	87.4	279.0	1.5	2.3	2.9	84.0	91.0	95.0	2.3	4 to 16	1.5 to 25	4 to 16	1.5 to 25
0 442 73	6300	19900	18300	17000	16000	15300	14800	14600	14800	17900	117.9	530.0	2.2	2.6	2.3	87.0	93.0	96.0	2.3	4 to 16	1.5 to 25	4 to 16	1.5 to 25
0 442 74	8000	44600	39200	35200	32100	29800	28000	26700	26100	28500	195.0	336.5	1.3	1.7	1.8	88.0	93.0	96.0	1.6	4 to 16	1.5 to 25	4 to 16	1.5 to 25
Control and circuit isolation: Primary 460 V - Secondary 115-230 V																							
0 442 81	40	67	61	57	53	51	49	48	49	58	3.9	7.4	8.2	10.0	8.7	61.8	76.4	84.4	9.7	1 to 4	1 to 4	1 to 4	1 to 4
0 442 82	63	120	110	99	92	86	82	79	78	90	6.0	11.8	7.0	9.1	8.8	61.7	76.3	84.3	8.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 83	100	190	180	160	150	140	140	130	130	150	8.2	17.2	7.3	9.3	8.6	63.6	77.7	85.3	8.7	1 to 4	1 to 4	1 to 4	1 to 4
0 442 84	160	330	300	270	250	240	230	220	220	260	11.2	23.2	5.9	7.4	6.9	67.4	80.5	87.3	6.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 85	250	590	530	480	450	420	400	390	390	440	15.0	31.2	5.0	6.4	6.1	70.6	82.8	88.9	5.9	1 to 4	1 to 4	1 to 4	1 to 4
0 442 86	400	2500	1900	1600	1300	1100	1020	920	840	810	18.3	42.4	2.0	3.3	4.8	73.9	85.0	90.4	3.8	1 to 4	1 to 4	1 to 4	1 to 4
0 442 87	630	2300	1800	1500	1300	1100	1000	900	800	800	25.5	75.7	2.1	3.5	4.6	71.4	83.2	89.3	3.4	1 to 4	1 to 4	1 to 4	1 to 4
0 442 88	1000	3400	2800	2300	2000	1800	1600	1500	1400	1300	44.2	72.4	1.2	1.9	2.7	80.6	89.2	93.3	2.2	1 to 16	1 to 16	1 to 16	1 to 16
0 442 89	1600	10300	8700	7600	6700	6100	5600	5200	5000	5100	65.5	92.4	1.0	1.4	1.7	83.9	91.2	94.5	1.4	2.5 to 10	1.5 to 16	2.5 to 10	1.5 to 16
0 442 90	2500	10700	9000	7800	6900	6200	5700	5300	5100	5200	86.5	140.8	1.2	1.7	2.1	84.2	91.4	94.7	1.7	4 to 16	1.5 to 25	4 to 16	1.5 to 25
0 442 91	4000	20300	16900	14500	12800	11500	10500	9800	9200	9400	86.3	224.8	1.8	2.7	3.3	84.2	91.4	94.7	2.6	4 to 16	1.5 to 25	4 to 16	1.5 to 25