

Transformers on EI and UI core

Safety isolating transformers



They are used to change the electrical voltage to the desired value at the input or output, where the use of safety voltage used for the operation of electrical appliances or the electrical network is prescribed.

Type range: TR 9402 to TR 9409, TR 9402/1 to TR 9409/1

We also produce **atypical** transformation ratios according to the customer's request.

Safety transformers									
TR 9401 – TR 9409 type range									
PRIMARY VOLTAGE		POWER	CORE TYPE	OUTPUT VOLTAGE AND CURRENT		NO-LOAD LOSSES		TOTAL LOSSES	EFFICIENCY
type designation				[V / A]		[W]			
230 V / 50 HZ	400 V / 50 HZ	[VA]	DIN	24 V	12 V	ΔP CU	ΔP FE	[W]	η [%]
TR 9402 -10	TR 9402/1 -10	10	EI 48 / 20	24 / 0.41	12 / 0.83	2	2	4	71
TR 9402 -20	TR 9402/1 -20	20	EI 60 / 25	24 / 0.83	12 / 1.66	2.5	3	5.5	78
TR 9402 -30	TR 9402/1 -30	30	EI 75 / 20	24 / 1.25	12 / 2.50	3.5	4	7.5	80
TR 9402 -50	TR 9402/1 -50	50	EI 75 / 25	24 / 2.08	12 / 4.16	5.1	5.1	10.2	83
TR 9403 -80	TR 9403/1 -80	80	EI 84 / 35	24 / 3.33	12 / 6.66	7	7.4	14.4	84
TR 9401 -100	TR 9401/1 -100	100	EI 84 / 40	24 / 4.16	12 / 8.33	8.2	8	16.2	86
TR 9404 -125	TR 9404/1 -125	125	EI 96 / 35	24 / 5.20	12 / 10.41	10	10	20	86
TR 9404 -160	TR 9404/1 -150	160	EI 96 / 45	24 / 6.25	12 / 12.50	10.4	10.3	20.7	88
TR 9405 -200	TR 9405/1 -200	200	EI 96 / 50	24 / 8.33	12 / 16.66	13.5	12.5	26	88
TR 9409 -250	TR 9409/1 -250	250	EI 120 / 40	24 / 10.41	12 / 20.83	15.2	15	30.2	89
TR 9409 -315	TR 9409/1 -315	315	EI 120 / 50	24 / 13.12	12 / 26.25	16	15.5	31.5	88
TR 9409 -400	TR 9409/1 -400	400	EI 120 / 70	24 / 16.66	12 / 33.33	16.2	18	34.2	88
TR 9409 -500	TR 9409/1 -500	500	EI 150 / 50	24 / 20.83	12 / 41.66	19	21	40	90
TR 9409 -800	TR 9409/1 -800	800	EI 150 / 80	24 / 33.33	12 / 66.60	24.8	27	51.8	93
TR 9409 -1000	TR 9409/1 -1000	1000	EI 192 / 60	24 / 41.6	12 / 83.30	26.2	32	58.2	94
TR 9409	TR 9409/1	1400	EI 192 / 80	24 / 58.3	12 / 116.6	31	38.8	69.8	95
TR 9409	TR 9409/1	1600	EI 192 / 80	24 / 62.5	12 / 125	34	42	76	95
TR 9409	TR 9409/1	2000	EI 192 / 100	24 / 83.3	12 / 166.6	45	44	89	95
TR 9409	TR 9409/1	2500	EI 192 / 130	24 / 104.1	12 / 208.3	58	45	103	96

THERMAL CLASS:	F155°C
VOLTAGE WITHSTAND:	PRI/SEC/CORE 4,75kV 50Hz
SHORT-CIRCUIT RESISTANCE:	NOT SHORT-CIRCUIT RESISTANT
TEMPERATURE RISE (HEAT RUN):	max. 85°C
PROTECTION CLASS:	I.
PROTECTION:	IP00
AMBIENT TEMPERATURE:	ta40