

### 17.2 Fuse protection of control and isolation transformers

The transformer protected switch listed in the table e.g. PKZM0 by Eaton is added on the primary side. The overload release is adjusted to the stated current. If there should be a short-circuit trip it gets adjusted to the maximum value.

The adjustment values of the circuit breakers count up to 1.06 times of the nominal voltage. For higher mains voltage +/- 5% clamps shall be used.

For transformers > 2 KVA action of circuit breaker may happen in case of certain grid conditions ( $I_k > 6 \text{ KA}$ ) combined with an awkward electric torque. In such cases we recommend an input current limiter. This one may be ordered as additional equipment.

Trans- former power  in KVA	Protective unit PKZM0 at primary voltage:											
	230V		400V		415V		440V		500V		690V	
	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A	PKZM0- adjustment in A
0.02	0.16-T	0.1	0.16-T	0.5	0.16-T	0.15	0.16-T	0.1	0.16-T	0.1	0.16-T	0.1
0.04	0.25-T	0.2	0.25-T	0.2	0.16-T	0.15	0.16-T	0.15	0.16-T	0.15	0.16-T	0.1
0.06	0.40-T	0.3	0.25-T	0.2	0.25-T	0.2	0.25-T	0.2	0.16-T	0.2	0.16-T	0.1
0.10	0.63-T	0.5	0.40-T	0.3	0.40-T	0.3	0.40-T	0.3	0.25-T	0.2	0.25-T	0.2
0.16	1.0-T	0.8	0.63-T	0.5	0.63-T	0.5	0.63-T	0.4	0.40-T	0.4	0.40-T	0.3
0.20	1.6-T	1.0	0.63-T	0.6	0.63-T	0.6	0.63-T	0.5	0.63-T	0.5	0.40-T	0.3
0.25	1.6-T	1.3	1.0-T	0.7	1.0-T	0.7	1.0-T	0.7	0.63-T	0.6	0.63-T	0.4
0.32	1.6-T	1.5	1.0-T	0.9	1.0-T	0.9	1.0-T	0.8	1.0-T	0.7	0.63-T	0.5
0.40	2.5-T	2.0	1.6-T	1.1	1.6-T	1.1	1.6-T	1.0	1.0-T	0.9	1.0-T	0.7
0.50	2.5-T	2.4	1.6-T	1.4	1.6-T	1.3	1.6-T	1.2	1.6-T	1.1	1.0-T	0.8
0.63	4.0-T	3.0	2.5-T	1.7	2.5-T	1.7	2.5-T	1.6	1.6-T	1.4	1.6-T	1.0
0.80	4.0-T	3.8	2.5-T	2.2	2.5-T	2.1	2.5-T	2.0	2.5-T	1.7	1.6-T	1.3
1.00	6.3-T	4.7	4.0-T	2.7	4.0-T	2.6	4.0-T	2.5	2.5-T	2.2	2.5-T	1.6
1.20	6.3-T	5.8	4.0-T	3.3	4.0-T	3.2	4.0-T	3.0	4.0-T	2.7	2.5-T	1.9
1.40	10.0-T	6.7	4.0-T	3.8	4.0-T	3.7	4.0-T	3.5	4.0-T	3.1	2.5-T	2.3
1.60	10.0-T	7.4	6.3-T	4.2	6.3-T	4.1	6.3-T	4.0	4.0-T	3.4	4.0-T	2.5
2.00	16.0-T	10.0	6.3-T	5.3	6.3-T	5.1	6.3-T	4.8	6.3-T	4.2	4.0-T	3.1
2.50	16.0-T	11.5	10.0-T	6.6	10.0-T	6.4	10.0-T	6.0	6.3-T	5.3	6.3-T	4.0
3.00	20.0-T	16.0	16.0-T	10.0	16.0-T	10.0	10.0-T	7.1	10.0-T	6.2	6.3-T	4.5
4.00	20.0-T	18.1	16.0-T	10.4	16.0-T	10.0	16.0-T	10.0	10.0-T	8.3	10.0-T	6.0
5.00	25.0-T	24.0	16.0-T	14.0	16.0-T	13.5	16.0-T	12.5	16.0-T	11.0	10.0-T	8.0
6.30	32.0	30.0	20.0-T	17.5	16.0-T	15.3	16.0-T	15.8	16.0-T	13.9	16.0-T	10.2