

Type code:

- **TFS: AF lock-out (Single-phase reactor) / EI-core**

Generally:

- AF lock-out:

This reactor causes the blocking of frequencies which are superimposed to the supply system (e.g. superimposed signal frequencies).

- Degree of protection IP00 (suitable for the installation in enclosures up to IP20)
- Ground connection as preparation for fitting in gears and systems of class of protection I
- Dimensioning for pollution severity P2
- maximum ambient temperature 40°C / Insulation class B
- Frequency 50Hz

Vacuum-resin impregnated

- Dimensioned for continuous operation (ED = 100 %)
- Connections - currents up to ca. 250 A on transformer terminals - shockproof according to VBG4
- currents higher than ca. 250 A with bolt connection – shock protection has to be ensured by the installation



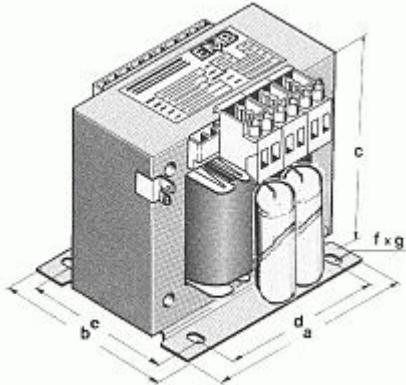
Standards and basics:

- VDE0570-1 (EN61558-1 / IEC61558-1) - follow-up standard for VDE0550-1  
„Safety of transformers, power packs and the like“
- VDE0570-2-20 (EN61558-2-20 / IEC61558-2-20) - follow-up standard for VDE0550-5  
„Particular requirements for small reactors“
- General technical conditions and information

- Voltage range:

400 V

- **TFS**



Remark:

When inquiring for a filter reactor you should consider that following data is decisive for the calculation:

- Nominal voltage (phase voltage) - U in Volt
  - Reactive power of the compensation equipment - Q
  - Blocking frequency - fr in Hz
  - System frequency - fn in Hz
- or
- Nominal voltage (phase voltage) - U in Volt
  - Reactive power of the compensation equipment - Q
  - relationship XN/XC (\*) - p (in %)
  - Blocking frequency - fr in Hz
- or
- Nominal current - IN in Ampere
  - Inductance - L in mH
  - Blocking frequency - fr in Hz
- (\*) XN = reactance at nominal frequency; XC = reactance

**Dimensions and weights for the types TFS**

(Values at: Nominal voltage 400 V and a blocking frequency of 217Hz at 50 Hz nominal frequency)

Type	Compensating power in kvar	Nominal current in A	Inductance in mH	Capacitance in $\mu$ F	a in mm	b in mm	c in mm	d in mm	e in mm	f in mm	Cu-weight in kg	total weight in kg
TFS0,05	20	29	0,1273	133	78	60	90	56	48	4,8	0,3	1,2
TFS0,075	25	36	0,1019	166	85	65	98	64	50	4,8	0,4	1,5
TFS0,1	35	50	0,0728	232	85	80	98	64	64	4,8	0,45	2,0
TFS0,13	40	58	0,0637	265	96	75	105	84	62	5,8	0,65	2,3

TFS0,16	50	73	0,0509	332	96	85	105	84	73	5,8	0,8	2,8
TFS0,2	70	101	0,0364	464	105	95	115	80,5	73	5,8	0,9	3,2
TFS0,25	90	130	0,0283	597	120	95	125	90	74	5,8	1,0	3,8
TFS0,32	100	145	0,0255	663	120	105	125	90	85	5,8	1,2	4,7
TFS0,4	125	180	0,0204	829	120	105	125	90	85	5,8	1,4	5,6
TFS0,5	150	217	0,017	995	120	125	125	90	104	5,8	2,0	6,6
TFS0,63	175	253	0,0146	1161	150	115	150	122	90	7,0	2,6	7,5
TFS0,8	200	290	0,0127	1326	150	130	150	122	106	7,0	3,2	9,7
TFS1,0	300	430	0,00852	1990	174	125	170	135	86	7,0	4,0	11,5
TFS1,5	500	717	0,05511	3320	174	155	170	135	116	7,0	5,0	16,4
TFS2,0	750	1085	0,0034	4975	195	180	185	150	140	10,0	6,5	22,
TFS2,5	1000	1435	0,0026	6630	195	190	185	150	150	10,0	8,0	26,2

Remark: Depending on the variable of the capacitor the dimensions b or c increase by max. 80 mm

Options (on inquiry)

- Reactors with other relationships XN/XC (respectively blocking frequencies)
- Installation in enclosure
- Reactors with other system voltages and other system frequencies
- Reactors in horizontal type of construction
- Snap-On fixing (up to size 0,2 kVA)
- adding of elements for temperature monitoring (e.g. PTC thermistors)