

DS - Transformer

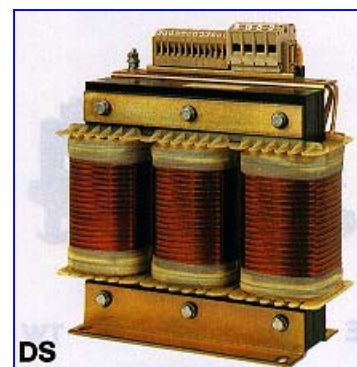
In some countries the maximum primary fusing of the single phase may only be 16A. In these cases the SDS series cannot be used. The transformers of the construction series DS are three-phase current transformers. They are designed for electrical energy supply of several humidifiers. In series they are equipped with primary fusing. Subdivision of the secondary electrical capacity and fusing must be done at the place of installation.

Description

Three-phase transformers as per VDE 0550, class T40E insulation, separate windings, mounted vertically on base angle supports, complete resin impregnation, protection system IP00, class 1 protection, 50/60Hz, screw connection, Dyn5.

primary: 3 x 400V, ± 5% + fuse
secondary: 3 x 48/53V (without fuse)

The DS transformer has 3 outgoing circuits: U-V; V-W; W-U. Subdivision must be done at the place of installation according to the number of consumers.



Delivery range

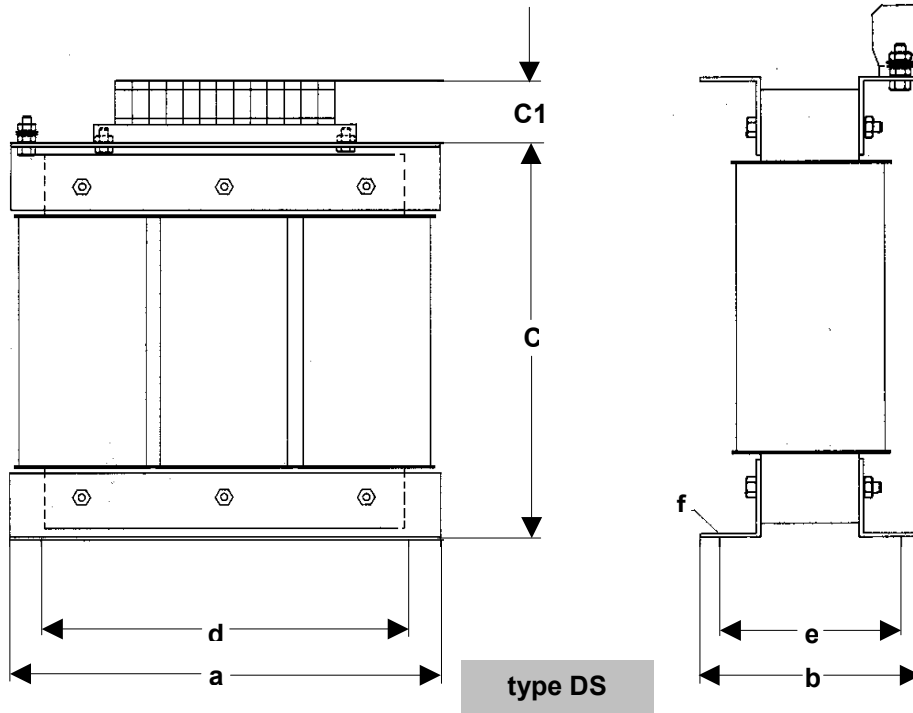
type	order no. without secondary fuse block
DS4.0	77 002 40
DS5.0	77 002 50
DS6.3	77 002 60
DS7.5	77 002 70
DS8.8	77 002 80
DS10.0	77 002 10

Technical data

type	power KWA	stand by loss ca. Watt	voltage drop ca. %	efficiency ca. %	short-circuit voltage (UK) ca. %
DS4.0	4,0	63	3	95,6	3
DS5.0	5,0	72	2,9	95,8	3
DS6.3	6,3	114	2,2	96,1	2,2
DS7.5	7,5	97	3	95,8	3,2
DS8.8	8,8	122	2,4	96,4	2,5
DS10.0	10,0	158	2	96,5	2

Dimensions

type	power KVA	a mm	b mm	c mm	c1 mm	d mm	e mm	f mm	weight kg
DS4.0	4,0	300	195	270	60-90	240	160	11x15	45
DS5.0	5,0	360	165	312	60-90	310	125	11x15	55
DS6.3	6,3	360	195	312	60-90	310	155	11x15	70
DS7.5	7,5	420	175	365	60-90	370	130	11x15	75
DS8.8	8,8	420	195	365	60-90	370	150	11x15	80
DS10.0	10,0 102	420	225	365	60-90	370	180	11x15	100



Fuse ratings

type	primary		secondary	
	ST	SW	ST	SW
DS 4.0	Neozed D01	3 x 16A	----	----
DS 5.0	Neozed D01	3 x 16A	----	----
DS 6.3	Neozed D02	3 x 20A	----	----
DS 7.5	Neozed D02	3 x 25A	----	----
DS 8.8	Neozed D02	3 x 25A	----	----
DS 10.0	Neozed D02	3 x 35A	----	----

ST= fuse type

SW= fuse rating

Neozed is an internationally used material for fuse links. The fuse steps are D01, D02 and D03. This corresponds to fuse values of 2A – 100A.

Dimensioning

Dimensioning of the transformer is not only determined by the sum of electrical power consumption of the humidifiers at 48V, but also by the ohmic resistance of the cable supply lines. This is why the distance between the transformer and the humidifier should be as small as possible.

The power reserve of the transformer should be approx. 15%.