

**ED3S,  
Motor reactor**

6 A up to 2250 A



Certificates



Technical data

<b>Rated current</b>	6-2250 A
<b>Rated voltage</b>	380-500 V
<b>Rated frequency</b>	50/60 Hz
<b>Switching frequency</b>	≥2kHz
<b>Overloadability</b>	110% I <sub>n</sub> (continuous)
	160% I <sub>n</sub> 1 min/h (momentary)
<b>Cooling</b>	AN – air natural
<b>Ambient temperature</b>	40°C – standard design
	45°C – maritime design
	≥50°C – special design
<b>Insulation class</b>	F (155°C)
<b>Winding material</b>	Aluminium, copper
<b>Standard equipment</b>	NC temperature switch
<b>Mounting</b>	standing, vertical
<b>Degree of protection</b>	IP00, class I
<b>Applied standards</b>	EN 61558-20, EN 60076-6

\*- UL approved insulation system

**Function**

Motor reactors have higher inductance than dv/dt limiting reactors thus they effectiveness in voltage steepness and peak value reduction is much better. ED3S reactors are a good choice when medium motor cables are used and protection against EMC disturbances is important for the application.

**Benefits**

- Reduction of the steepness of voltage rise dv/dt
- Limitation of the amplitude of the overvoltage at the motor terminals
- Decrease in motor temperature
- Increase in reliability and motor lifetime
- Decrease of motor noise and EMC disturbances

**Application**

- AC drive systems with frequency converters
- AC motors with lowered insulation strength
- Motor cables of medium length

## Dimensions

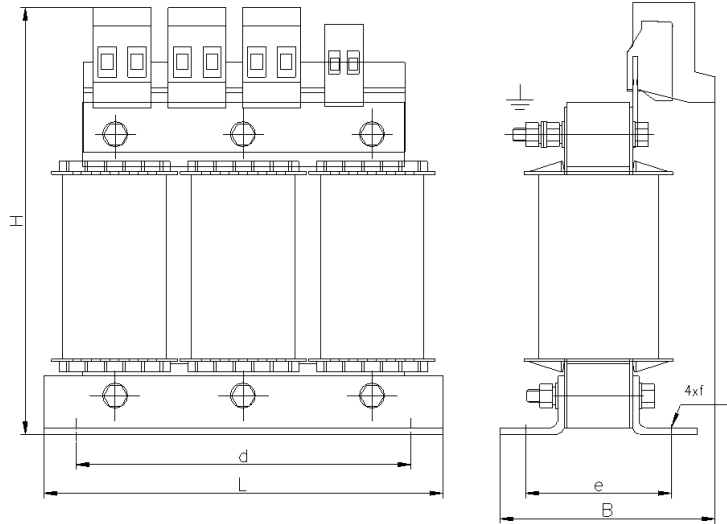
380-500 V, 50/60 Hz

No.	Type of reactor	Drive power	Inductance	Current	Winding material	L	B	H	d	e	f	Weight [kg]	Execution
		[kW]	[mH]	[A]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		
1	<b>ED3S - 2,7mH/6A</b>	2,2	2,7	6	Cu	125	61	136	100	45	4x(5x8)	1,8	A
2	<b>ED3S - 2,1mH /8A</b>	3	2,1	8	Cu	125	61	136	100	45	4x(5x8)	2	A
3	<b>ED3S - 1,62mH/10A</b>	4	1,62	10	Cu	125	71	136	100	55	4x(5x8)	2,6	A
4	<b>ED3S - 1,25mH/13A</b>	5,5	1,25	13	Cu	125	71	136	100	55	4x(5x8)	2,8	A
5	<b>ED3S - 0,95mH/17A</b>	7,5	0,95	17	Cu	155	77	160	130	57	4x(8x11)	3,7	A
6	<b>ED3S - 0,68mH/24A</b>	11	0,68	24	Cu	155	85	166	130	57	4x(8x11)	4,7	A
7	<b>ED3S - 0,51mH/32A</b>	15	0,51	32	Cu	155	99	166	130	72	4x(8x11)	6,1	A
8	<b>ED3S - 0,43mH/38A</b>	18,5	0,43	38	Cu	195	97	193	173	72	4x(8x11)	6,3	A
9	<b>ED3S - 0,36mH/46A</b>	22	0,36	46	Cu	195	107	193	173	82	4x(8x11)	8,1	A
10	<b>ED3S - 0,26mH/62A</b>	30	0,26	62	Cu	195	114	160	173	82	4x(8x11)	10	B
11	<b>ED3S - 0,23mH/72A</b>	37	0,23	72	Cu	208	120	182	173	85	4x(8x11)	12	B
12	<b>ED3S - 0,18mH/90A</b>	45	0,18	90	Cu	208	130	182	173	95	4x(8x11)	15	B
13	<b>ED3S - 0,15mH/110A</b>	55	0,15	110	Al	240	150	210	198	115	4x(11x29)	17	B
14	<b>ED3S - 0,11mH/150A</b>	75	0,11	150	Al	240	176	210	198	130	4x(11x29)	22	B
15	<b>ED3S - 0,090mH/180A</b>	90	0,09	180	Al	300	164	268	240	120	4x(11x15)	24	B
16	<b>ED3S - 0,078mH/210A</b>	110	0,078	210	Al	300	180	268	240	133	4x(11x15)	29	B
17	<b>ED3S - 0,062mH/260A</b>	132	0,062	260	Al	300	190	268	240	145	4x(11x15)	35	B
18	<b>ED3S - 0,051mH/320A</b>	160	0,051	320	Al	357	182	307	300	131	4x(11x21)	41	B
19	<b>ED3S - 0,040mH/400A</b>	200	0,04	400	Al	357	202	310	300	146	4x(11x21)	51	B
20	<b>ED3S - 0,032mH/500A</b>	250	0,032	500	Al	340	238	342	300	163	4x(11x21)	64	B
21	<b>ED3S - 0,027mH/600A</b>	315	0,027	600	Al	420	251	370	370	163	4x(13x18)	72	B
22	<b>ED3S - 0,025mH/660A</b>	355	0,025	660	Al	420	266	400	370	173	4x(13x18)	87	B
23	<b>ED3S - 0,022mH/750A</b>	400	0,022	750	Al	420	278	443	370	183	4x(13x18)	106	B
24	<b>ED3S - 0,018mH/900A</b>	500	0,018	900	Al	500	310	545	430	208	4xM12	114	C
25	<b>ED3S - 0,016mH/1000A</b>	560	0,016	1000	Al	500	310	595	430	208	4xM12	138	C
26	<b>ED3S - 0,015mH/1100A</b>	630	0,015	1100	Al	500	327	595	430	218	4xM12	154	C
27	<b>ED3S - 0,013mH/1250A</b>	710	0,013	1250	Al	500	381	670	430	228	4xM12	203	C
28	<b>ED3S - 0,011mH/1450A</b>	800	0,011	1450	Al	500	411	670	430	258	4xM12	248	C
29	<b>ED3S - 0,010mH/1650A</b>	900	0,01	1650	Al	560	450	725	490	278	4xM12	297	C
30	<b>ED3S - 0,009mH/1850A</b>	1000	0,009	1850	Al	560	460	765	490	278	4xM12	316	C
31	<b>ED3S - 0,008mH/2050A</b>	1120	0,008	2050	Al	560	470	830	490	288	4xM12	381	C
32	<b>ED3S - 0,007mH2250A</b>	1250	0,007	2250	Al	560	490	880	490	308	4xM12	430	C

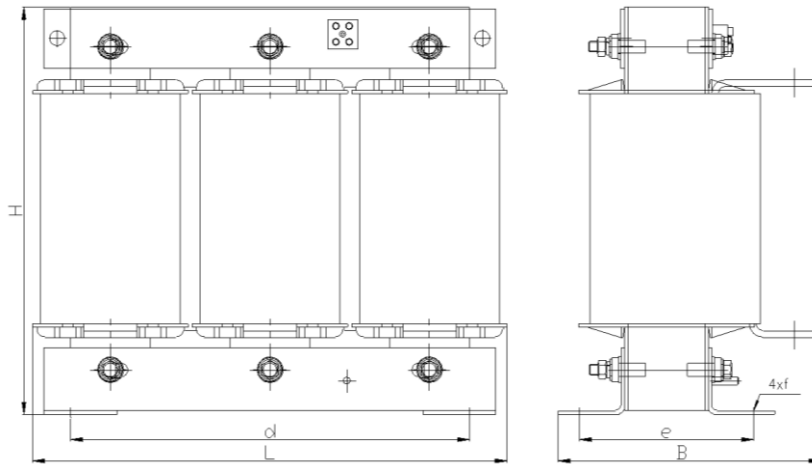
Manufacturer reserves the right to make changes resulting from the continuous development of products offered

Drawings

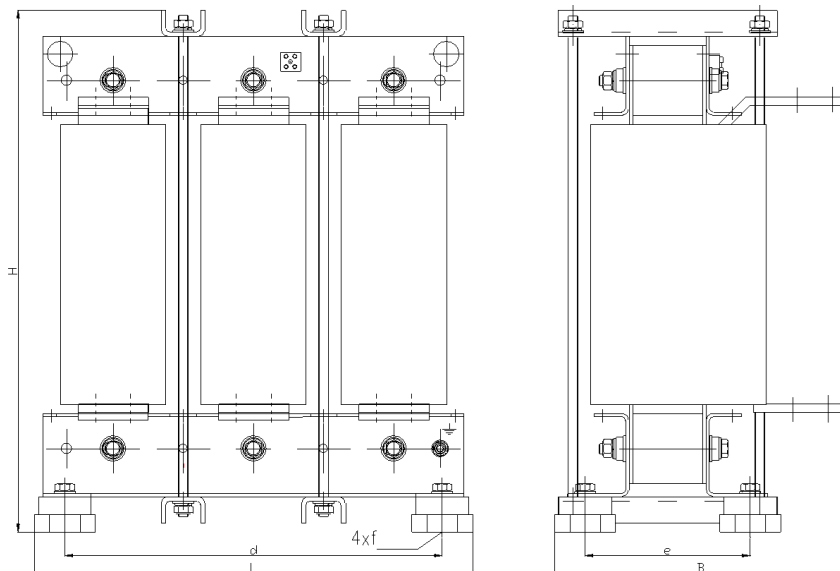
Execution A



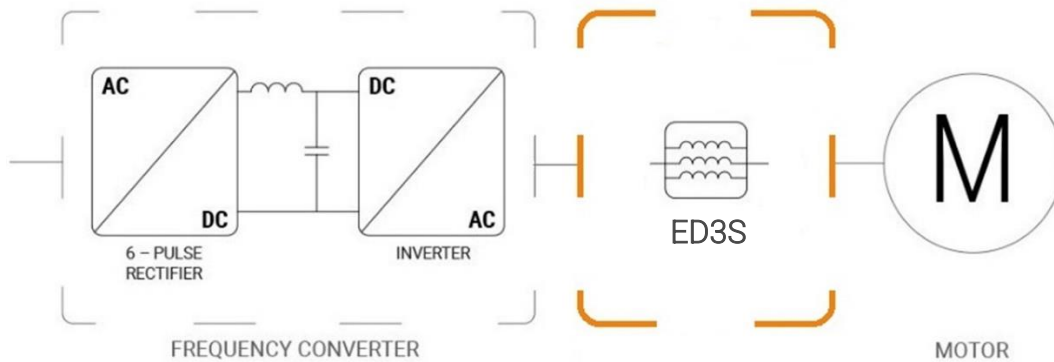
Execution B



Execution C



## Typical application diagram



## Typecode

E	D	3	S	0,078mH/210A	380-500V	50/60Hz	fkmin=2kHz	T40F	AL	
Manufacturer symbol	Instrument type	Number of phases	Application type	Rated inductance / current	Rated voltage	Rated frequency	Minimum switching frequency	Insulation class	Winding material Blank if copper	Protection degree Blank if IP00

## Special execution

Products with parameters exceeding the catalogue card can be made upon prior contact

## Contact

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