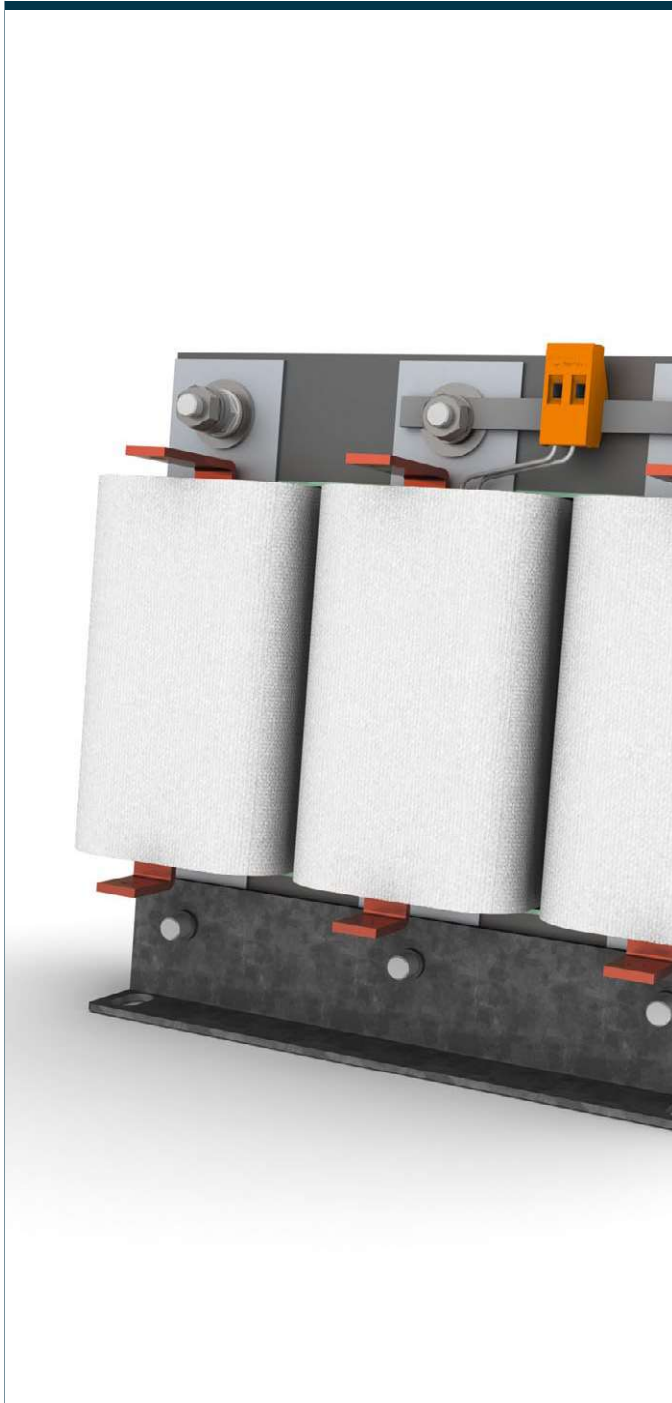


Detuned reactor **DR3**



General Data

Rated input voltage 3 x 400 Vac
For reactive power 12,5 - 50 kVAR
Detuning factor 7 - 14 %
Insulation class F/H
Maximum ambient temperature 40 °C
Degree of protection IP 00

Advantages

No overloading of the capacitors
Stabilizing mains impedance
Low inductance tolerance
Very good corrosion protection and low noise thanks to vacuum impregnation
Extended linearity
Thermal design for continuous duty in the event of mains operation and harmonics
Optional with thermal switch

Applications

Detuned reactor for choking idle reactive power compensation capacitors.

Standards

Detuning reactor in accordance with EN 61558 Part 1, 61558 Part 20, UL 506, CSA 22.2

Approvals



UL 506, CSA 22.2

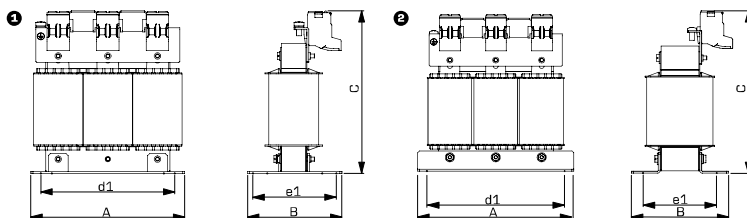


Detuned reactor DR3



Typ	DR3 12,5/7	DR3 12,5/7/T	DR3 12,5/14	DR3 12,5/14/T	DR3 25/7	DR3 25/7/T
Electrical data						
Operating data						
Rated voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
for reactive power	12.5 kVAr	12.5 kVAr	12.5 kVAr	12.5 kVAr	25.0 kVAr	25.0 kVAr
Current per phase at 50 Hz (I)	19.5 A	19.5 A	19.5 A	19.5 A	36.0 A	36.0 A
Inductance linear to (at ≥95 % L; Im)	27.3 A	27.3 A	27.3 A	27.3 A	50.4 A	50.4 A
Inductance per phase (L)	3.220 mH	3.220 mH	6.750 mH	6.750 mH	1.590 mH	1.590 mH
Tolerance	±3 %	±3 %	±3 %	±3 %	±3 %	±3 %
Detuning factor	ρ = 7 %	ρ = 7 %	ρ = 14 %	ρ = 14 %	ρ = 7 %	ρ = 7 %
Temperature control	No	Yes	No	Yes	No	Yes
Resonance frequency	189 Hz	189 Hz	134 Hz	134 Hz	189 Hz	189 Hz
Output						
Power loss	115.0 W	115.0 W	150.0 W	150.0 W	140.0 W	140.0 W
Approvals						
Approvals	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)
Environment						
Ambient temperature max.	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Test voltage	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz
Order numbers						
Order Number	DR3 12,5/7	DR3 12,5/7/T	DR3 12,5/14	DR3 12,5/14/T	DR3 25/7	DR3 25/7/T
Mechanical data						
Terminal and mounting						
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M8	M8	M8	M8	M8	M8
Terminals phase	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²
Terminals PE	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5
Measures and weights						
Weight	8.70 kg	8.70 kg	15.00 kg	15.00 kg	12.70 kg	12.70 kg
Dimension picture (in mm)	1	1	2	2	1	1
A	185	185	240	240	212	212
B	125	125	140	140	125	125
C	215	215	245	245	235	235
d1	170	170	185	185	175	175
e1	77	77	85	85	95	95

Dimension pictures



1.1

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2



Detuned reactor DR3



Typ	DR3 25/14	DR3 25/14/T	DR3 50/7	DR3 50/7/T	DR3 50/14	DR3 50/14/T
Electrical data						
Operating data						
Rated voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
for reactive power	25.0 kVAr	25.0 kVAr	50.0 kVAr	50.0 kVAr	50.0 kVAr	50.0 kVAr
Current per phase at 50 Hz (I)	36.0 A	36.0 A	72.0 A	72.0 A	72.0 A	72.0 A
Inductance linear to (at ≥95 % L; Im)	50.4 A	50.4 A	129.6 A	129.6 A	129.6 A	129.6 A
Inductance per phase (L)	3.350 mH	3.350 mH	0.750 mH	0.750 mH	1.660 mH	1.660 mH
Tolerance	±3 %	±3 %	±3 %	±3 %	±3 %	±3 %
Detuning factor	ρ = 14 %	ρ = 14 %	ρ = 7 %	ρ = 7 %	ρ = 14 %	ρ = 14 %
Temperature control	No	Yes	No	Yes	No	Yes
Resonance frequency	134 Hz	134 Hz	189 Hz	189 Hz	134 Hz	134 Hz
Output						
Power loss	165.0 W	165.0 W	180.0 W	180.0 W	320.0 W	320.0 W
Approvals						
Approvals	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)	cURus (pending)
Environment						
Ambient temperature max.	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)	40 °C (60 °C Cl. H)
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Insulation class	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)	F (40 °C) / H (60 °C)
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Test voltage	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz
Order numbers						
Order Number	DR3 25/14	DR3 25/14/T	DR3 50/7	DR3 50/7/T	DR3 50/14	DR3 50/14/T

Order Number	DR3 25/14	DR3 25/14/T	DR3 50/7	DR3 50/7/T	DR3 50/14	DR3 50/14/T
Mechanical data						
Terminal and mounting						
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M8	M8	M8	M8	M8	M8
Terminals phase	Screw clamp, 10 mm ²	Screw clamp, 10 mm ²	Flat copper	Flat copper	Flat copper	Flat copper
Terminals PE	Bolt, M5	Bolt, M5	Bolt, M8	Bolt, M8	Bolt, M8	Bolt, M8
Measures and weights						
Weight	19.80 kg	19.80 kg	24.70 kg	24.70 kg	39.00 kg	39.00 kg
Dimension picture (in mm)	2	2	3	3	3	3
A	240	240	256	256	300	300
B	150	150	140	140	160	160
C	245	245	234	234	270	270
d1	185	185	200	200	224	224
e1	95	95	90	90	119	119

Dimension pictures

