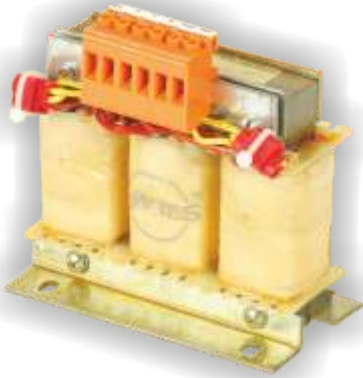


Shunt Reactors (Inductive Load Reactors)

ENT.ERS Series



Shunt reactors are designed to compensate the capacitive power used by long underground power lines, UPS, computers, electronic ballast, and energy saving lamps.

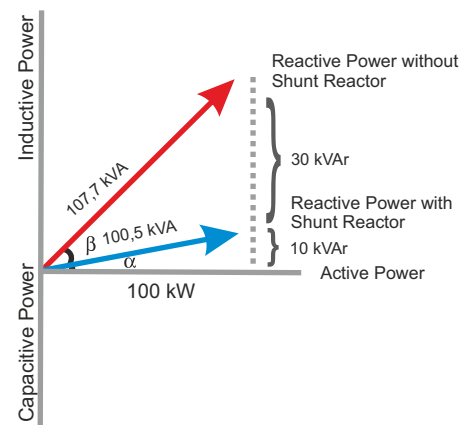
ENTES shunt reactors are designed in European standards to have long operating lives and endure difficult operating conditions. These devices which designed to provide inductive load requirements have the CE mark.

Features;

- Single or three-phase, highly conductive design with air gap
 - F isolation class insulation material on the windings resistant to 155°C
 - High quality copper or aluminum windings (copper coated terminal on aluminum windings)
 - Custom designs to meet customer specifications
 - Thermal protection against overload
 - Vacuum impregnated varnish method that improves efficiency by reducing heat losses, provides protection against humidity, and enables quiet operation
- CE mark and compatibility with EN 61558 2-20

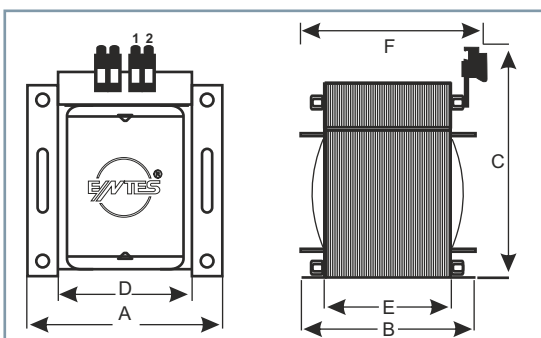
| | Without Shunt Reactor | With Shunt Reactor |
|--------------------|-----------------------|--------------------|
| Active Power | 100 kW | 100 kW |
| Reactive Power | 40 kVAr | 10 kVAr |
| Apparent Power | 107,7 kVA | 100,5 kVA |
| Power Factor Ratio | 0,928 | 0,995 |

Reactive Power



Single Phase Shunt Reactors

| Type | kVAr | L (mH) | I _{rms} (A) | Operating Voltage | Size | Weight (kg) |
|--------------------------------------|------|--------|----------------------|-------------------|------|-------------|
| ENT.ERS1 230/0,1 | 0,1 | 1661 | 0,44 | 230V 50Hz | 1 | 1,3 |
| ENT.ERS1 230/0,25 | 0,25 | 672 | 1,1 | 230V 50Hz | 1 | 2 |
| ENT.ERS1 230/0,5 | 0,5 | 338 | 2,17 | 230V 50Hz | 2 | 3,5 |
| ENT.ERS1 230/1 | 1 | 168 | 4,35 | 230V 50Hz | 3 | 8 |
| ENT.ERS1 230/1,5 | 1,5 | 103 | 6,82 | 230V 50Hz | 4 | 10 |
| ENT.ERS1 230/2,5 | 2,5 | 67 | 10,9 | 230V 50Hz | 6 | 20 |
| ENT.ERS1 230/0,3-0,4-0,5 (SELECTIVE) | 0,5 | 380 | 2,17 | 230V 50Hz | 1 | 4,25 |



| Size | A | B | C | D | E | F |
|------|-----|-----|-----|-----|-----|-----|
| 1 | 84 | 76 | 91 | 64 | 64 | 65 |
| 2 | 96 | 102 | 99 | 84 | 87 | 89 |
| 3 | 150 | 113 | 141 | 122 | 89 | 90 |
| 4 | 150 | 129 | 141 | 122 | 104 | 105 |
| 5 | 150 | 153 | 141 | 122 | 128 | 130 |
| 6 | 192 | 166 | 299 | 130 | 148 | 150 |



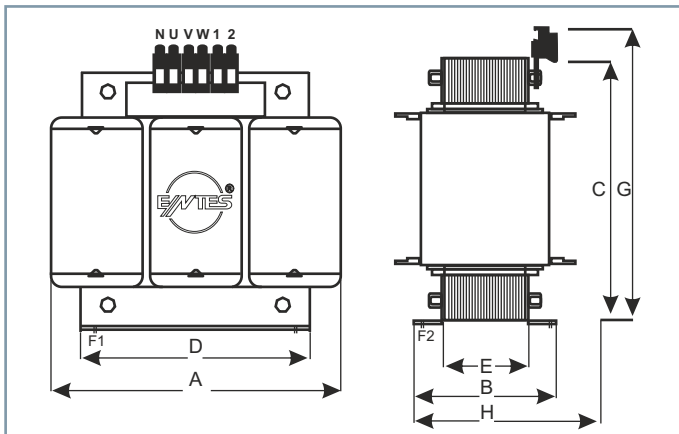
Shunt Reactors (Inductive Load Reactors)

ENT.ERS Series

Three Phase Shunt Reactors

| Type | kVAr | L (mH) | I _{rms} (A) | Operating Voltage | Size | Weight (kg) |
|-------------------|------|--------|----------------------|-------------------|------|-------------|
| ENT.ERS3 400/0,25 | 0,25 | 2000 | 0,36 | 400V 50Hz | 1 | 2 |
| ENT.ERS3 400/0,5 | 0,5 | 1000 | 0,73 | 400V 50Hz | 1 | 3,7 |
| ENT.ERS3 400/1 | 1 | 505 | 1,45 | 400V 50Hz | 1 | 5 |
| ENT.ERS3 400/1,5 | 1,5 | 336 | 2,2 | 400V 50Hz | 2 | 9,5 |
| ENT.ERS3 400/2 | 2 | 252 | 2,9 | 400V 50Hz | 3 | 9,5 |
| ENT.ERS3 400/2,5 | 2,5 | 203 | 3,6 | 400V 50Hz | 3 | 10 |
| ENT.ERS3 400/3 | 3 | 168 | 4,35 | 400V 50Hz | 4 | 15 |
| ENT.ERS3 400/5 | 5 | 100 | 7,2 | 400V 50Hz | 4 | 20 |
| ENT.ERS3 400/7,5 | 7,5 | 68 | 10,9 | 400V 50Hz | 5 | 26 |
| ENT.ERS3 400/10 | 10 | 51 | 14,5 | 400V 50Hz | 6 | 33,5 |
| ENT.ERS3 400/15 | 15 | 34 | 21,74 | 400V 50Hz | 6 | 54 |
| ENT.ERS3 400/20 | 20 | 26 | 29 | 400V 50Hz | 7 | 110 |
| ENT.ERS3 400/25 | 25 | 20 | 36,3 | 400V 50Hz | 7 | 115 |
| ENT.ERS3 400/40 | 40 | 13 | 58 | 400V 50Hz | 8 | 140 |

Power Factor Correction



| Size | A | B | C | D | E | G | H |
|------|-----|-----|-----|-----|-----|-----|-----|
| 1 | 180 | 102 | 150 | 132 | 82 | 220 | 202 |
| 2 | 180 | 120 | 150 | 132 | 100 | 220 | 220 |
| 3 | 240 | 102 | 200 | 175 | 76 | 270 | 202 |
| 4 | 240 | 126 | 200 | 175 | 100 | 270 | 226 |
| 5 | 300 | 140 | 250 | 225 | 104 | 320 | 240 |
| 6 | 360 | 163 | 300 | 265 | 118 | 370 | 263 |
| 7 | 420 | 247 | 350 | 315 | 187 | 420 | 347 |
| 8 | 480 | 250 | 400 | 360 | 190 | 470 | 350 |

Connection Diagrams

