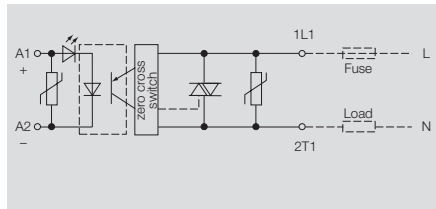


## Power solid-state relay

### PSSR

- Load circuit 1-phase 12...275 VAC / 20 A
- Zero- voltage switching
- Ready-to-use: click on rail - wire up - ready
- Wear- & noiseless switching
- High peak current carrying capacity  
I<sub>t</sub> = 312 A<sup>2</sup>s (10 ms)

### PSSR 24 V DC / 1 PH AC 20 A



### Technical data

#### Control side

Rated voltage	3...32 V DC
Power rating	0.03...0.3 W
Making voltage	3 V
Dropout voltage	1 V
max. input frequency	10 Hz
Status indicator	LED green
Protective circuit	varistor

#### Load side

Solid-state type	Triac
Nominal switching voltage	12...275 V
Nominal switching current	20 A @ 55 °C
Voltage drop at max. load	0.85 V
Leakage current	< 1 mA
Short-circuit-proof/Protective circuit	no /varistor
Switch-on delay/Switch-off delay	10 ms /10 ms
Continuous current	20 A
Pulse loading, max. current/Fuse	250 A (10 ms)/FERRAZ gRC 25 A 14x51 165 A <sup>2</sup> s
Load category	AC 53: 5 A

#### General data

Ambient temperature (operational)	-30 °C...+80 °C
Storage temperature	-30 °C...+100 °C
UL 94 flammability class	
Humidity	40...85 % (indoor), no condensation
Approvals	CE, cURus
Standards	EN 60950 ;IEC 60947-4-3

#### Insulation coordination (EN 50 178)

Rated voltage	300 V
Rated impulse withstand voltage	4.0 kV
Clearance and creepage distances for control side - load side	≥ 6.4 mm
Surge category	III
Pollution severity	2

#### Dimensions

Clamping range (rating- / min. / max.)	mm <sup>2</sup>	16 / 1.5 / 16
Length x width x height	mm	98 x 22.5 x 116.1

#### Note

### Ordering data

#### Connection system

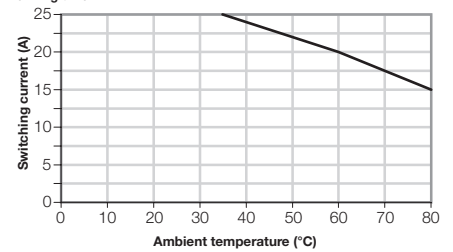
Type	Qty.	Order No.
PSSR 24VDC/1PH AC 20A	1	8952110000

#### Note

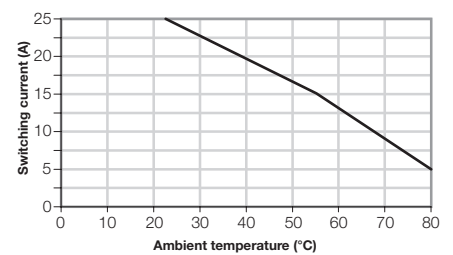
### Accessories

#### Note

Derating curve with moderate ventilation and 50% operational running time



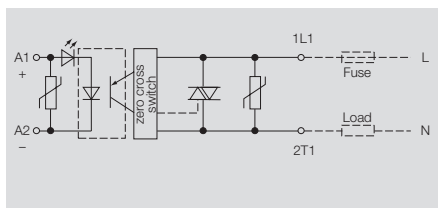
Derating curve without ventilation and in continual operation



**PSSR**

- Load circuit 1-phase 12...275 VAC / 20 A
- Zero- voltage switching
- Ready-to-use: click on rail - wire up - ready
- Wear- & noiseless switching
- High peak current carrying capacity  
I<sub>t</sub> = 312 A<sup>2</sup>s (10 ms)

**PSSR 230 V AC / 1 PH AC 20 A**



**Technical data**

**Control side**

Rated voltage	110...240 V DC / 150...240 V AC
Power rating	0.3...1.7 W
Making voltage	10 V DC / 150 V AC
Dropout voltage	1 V
max. input frequency	10 Hz
Status indicator	LED green
Protective circuit	RC element;varistor

**Load side**

Solid-state type	Triac
Nominal switching voltage	12...275 V
Nominal switching current	20 A @ 55 °C
Voltage drop at max. load	0.85 V
Leakage current	< 1 mA
Short-circuit-proof/Protective circuit	no /RC element ;varistor
Switch-on delay/Switch-off delay	30 ms /30 ms
Continuous current	20 A
Pulse loading, max. current/Fuse	250 A (10 ms)/FERRAZ gRC 25 A 14x51 165 A <sup>2</sup> s
Load category	AC 53: 5 A

**General data**

Ambient temperature (operational)	-30 °C...+80 °C
Storage temperature	-30 °C...+100 °C
UL 94 flammability class	
Humidity	40...85 % (indoor), no condensation
Approvals	CE, cURus
Standards	EN 60950 ;IEC 60947-4-3

**Insulation coordination (EN 50 178)**

Rated voltage	300 V
Rated impulse withstand voltage	4.0 kV
Clearance and creepage distances for control side - load side	≥ 6.4 mm
Surge category	III
Pollution severity	2

**Dimensions**

Clamping range (rating- / min. / max.)	mm <sup>2</sup>	16 / 1.5 / 16
Length x width x height	mm	98 x 22.5 x 116.1

**Note**

**Ordering data**

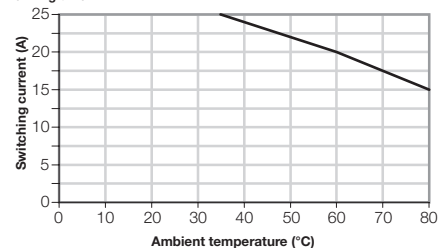
Connection system	Type	Qty.	Order No.
	PSSR 230VAC/1PH AC 20A	1	8952120000

**Note**

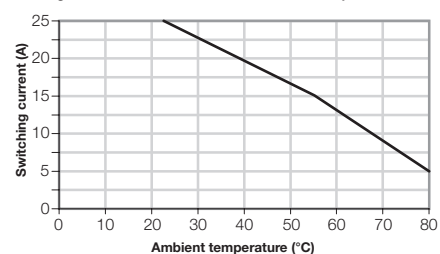
**Accessories**

**Note**

Derating curve with moderate ventilation and 50% operational running time



Derating curve without ventilation and in continual operation

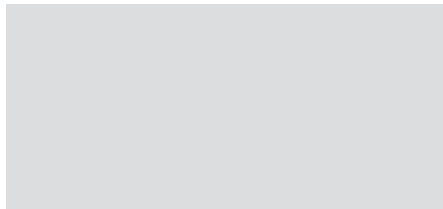
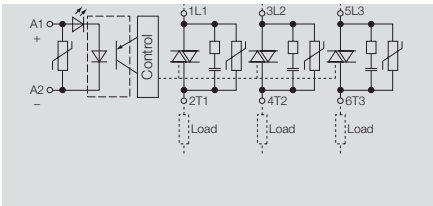


## Power solid-state relay

### PSSR

- Load circuit 3-phase 24...520 VAC / 15 A
- Ready-to-use: click on rail - wire up - ready
- Wear- & noiseless switching
- High peak current carrying capacity  
I<sub>t</sub> = 1500 A<sup>2</sup>s (10 ms)

### PSSR 24 V DC / 3 PH AC 15 A



### Technical data

#### Control side

Rated voltage  
Power rating  
Making voltage  
Dropout voltage  
max. input frequency  
Status indicator  
Protective circuit

8...30 V DC / 10...30 V AC  
0.1...2 W  
8 V DC / 10 V AC  
4 V  
10 Hz  
LED green  
RC element;varistor

#### Load side

Solid-state type  
Nominal switching voltage  
Nominal switching current  
Voltage drop at max. load  
Leakage current  
Short-circuit-proof/Protective circuit  
Switch-on delay/Switch-off delay  
Continuous current  
Pulse loading, max. current/Fuse  
Load category

Back to back thyristor  
24...520 V  
15 A @ 55 °C  
1.4 V  
< 1 mA  
no /RC element ;varistor  
30 ms /30 ms  
15 A  
550 A (10 ms)/FERRAZ gRC 63 A 22x58 1353 A<sup>2</sup>s  
AC 53: 3 x 12 A

#### General data

Ambient temperature (operational)  
Storage temperature  
UL 94 flammability class  
Humidity  
Approvals  
Standards

-40 °C...+80 °C  
-40 °C...+100 °C  
40...85 % (indoor), no condensation  
CE, cURus  
EN 60950 ;IEC 60947-4-3

#### Insulation coordination (EN 50 178)

Rated voltage  
Rated impulse withstand voltage  
Clearance and creepage distances for control side - load side  
Surge category  
Pollution severity

300 V  
4.0 kV  
≥ 6.4 mm  
III  
2

#### Dimensions

Clamping range (rating- / min. / max.) mm<sup>2</sup>  
Length x width x height mm

10 / 1.5 / 10  
98 x 89.6 x 126.2

#### Note

### Ordering data

#### Connection system

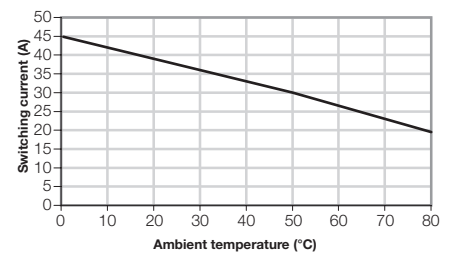
Type	Qty.	Order No.
PSSR 24VDC/3PH AC 20A	1	8952130000

#### Note

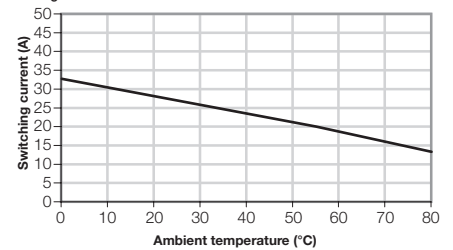
### Accessories

#### Note

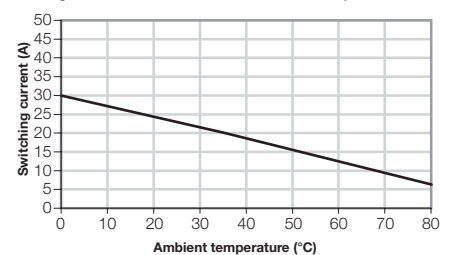
Derating curve with maximum ventilation



Derating curve with moderate ventilation and 50% operational running time



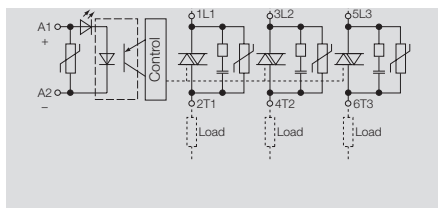
Derating curve without ventilation and in continual operation



**PSSR**

- Load circuit 3-phase 24...520 VAC / 15 A
- Ready-to-use: click on rail - wire up - ready
- Wear- & noiseless switching
- High peak current carrying capacity  
I<sub>t</sub> = 1500 A<sup>2</sup>s (10 ms)

**PSSR 230 V AC / 3 PH AC 15 A**



**Technical data**

**Control side**

Rated voltage  
Power rating  
Making voltage  
Dropout voltage  
max. input frequency  
Status indicator  
Protective circuit

90...240 V AC/DC  
0.4...2.6 W  
90 V AC/DC  
15 V  
10 Hz  
LED green  
RC element;varistor

**Load side**

Solid-state type  
Nominal switching voltage  
Nominal switching current  
Voltage drop at max. load  
Leakage current  
Short-circuit-proof/Protective circuit  
Switch-on delay/Switch-off delay  
Continuous current  
Pulse loading, max. current/Fuse  
Load category

Back to back thyristor  
24...520 V  
15 A @ 55 °C  
1.4 V  
< 1 mA  
no /RC element ;varistor  
30 ms /30 ms  
15 A  
550 A (10 ms)/FERRAZ gRC 63 A 22x58 1353 A<sup>2</sup>s  
AC 53: 3 x 12 A

**General data**

Ambient temperature (operational)  
Storage temperature  
UL 94 flammability class  
Humidity  
Approvals  
Standards

-40 °C...+80 °C  
-40 °C...+100 °C  
40...85 % (indoor), no condensation  
CE, cURus  
EN 60950 ;IEC 60947-4-3

**Insulation coordination (EN 50 178)**

Rated voltage  
Rated impulse withstand voltage  
Clearance and creepage distances for control side - load side  
Surge category  
Pollution severity

300 V  
4.0 kV  
≥ 6.4 mm  
III  
2

**Dimensions**

Clamping range (rating- / min. / max.) mm<sup>2</sup>  
Length x width x height mm

10 / 1.5 / 10  
98 x 89.6 x 126.2

**Note**

**Ordering data**

**Connection system**

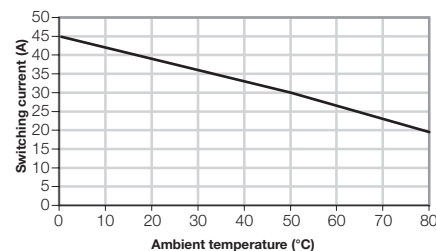
Type	Qty.	Order No.
PSSR 230VAC/3PH AC 20A	1	8952140000

**Note**

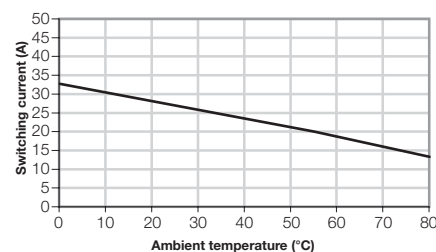
**Accessories**

**Note**

Derating curve with maximum ventilation



Derating curve with moderate ventilation and 50% operational running time



Derating curve without ventilation and in continual operation

