Tauro

FOR MAXIMUM PERFORMANCE

Fronius

HmT
electrical

FRONIUS TAURO

Direct variant.

System design flexibility

Max. performance up to 50° C

Direct sunlight

Optimizing costs

Active Double Wall Cooling

Power stage replacement

The three-phase Fronius Tauro in the 50 and 100 kW power classes promises maximum performance for decentral systems even under the harshest conditions.

With its smart hardware design, it offers not just BOS cost optimization but unprecedented flexibility in system design. Simple installation and the fastest service on the market ensure maximum yield.

TECHNICAL DATA FRONIUS TAURO

INPUT DATA	TAURO 50-3-D	TAURO ECO 50-3-D	TAURO ECO 99-3-D	TAURO ECO 100-3-D
Number of MPP trackers	3		1	
Max. input current ($I_{dc\ max}$)	134 A	87.5 A	175 A	
Max. input current module field (PV1 / PV2 / PV3)	36 / 36 / 72 A	75 / 75 / - A	75 / 75 / 75 A	
Max. short circuit current (PV1/ PV2/ PV3)	72 / 72 / 125	125 / 125 / -	125 / 125 / 125	
Max. short circuit current ($I_{scmax,\ inverter}$)	240	178	355	
DC input voltage range ($U_{dc\ min}$ - $U_{dc\ max}$)	200 - 1000 V		580 - 1000 V	
Feed-in start voltage ($U_{dc\ start}$)	200 V		650 V	
Usable MPP voltage range ($U_{mpp\ min}$ - $U_{mpp\ max}$)	400 - 870 V		580 - 930 V	
Number of DC connections (PV1 / PV2 / PV3)	4 / 3 / 7	7 / 7 / -	7 / 7 / 8	
Max. PV generator power ($P_{dc\ max}$)	75 kW_{peak}		150 kW_{peak}	

OUTPUT DATA	TAURO 50-3-D	TAURO ECO 50-3-D	TAURO ECO 99-3-D	TAURO ECO 100-3-D
AC nominal output ($P_{ac,r}$)	50,000 W		99,990 W	100,000 W
Max. output power	50,000 VA		99,990 VA	100,000 VA
AC output current ($I_{ac\ nom}$)	76 A		152 A	
Grid connection ($U_{ac,r}$)	3~ NPE 400/230 V ; 3~ NPE 380/220 V			
Frequency (frequency range f_{min} - f_{max})	50 Hz / 60 Hz (45 - 65 Hz)			
Power factor (cos $\phi_{ac,r}$)	0 - 1 ind. / cap.			

GENERAL DATA	TAURO 50-3-D	TAURO ECO 50-3-D	TAURO ECO 99-3-D	TAURO ECO 100-3-D
Dimensions (height x width x depth)	755 x 1109 x 346 mm (without wall mount)			
Weight	92 kg	74 kg	103 kg	
Degree of protection	IP 65			
Protection class	1			
Night-time consumption	< 16 W			
Cooling	Active cooling technology and double wall system			
Installation	Indoor and outdoor[1]			
Ambient temperature range	- 40 - + 65 °C [2]			
Certificates and compliance with standards [3]	AS/NZS 4777.2:2020, IEC62109-1/-2, VDE-AR-N 4105:2018, IEC62116, EN50549-1:2019 & EN50549-2:2019, VDE-AR-N 4110:2018, CEI 0-16:2019, CEI 0-21:2019			

[1] Direct under the sun is possible

[2] Optional AC-disconnect mounted inside the inverter: from - 30 to + 65 °C

[3] These are planned certificates. For the current certificates, please see **www.fronius.com/tauro-cert**

FRONIUS TAURO

Precombined variant.

System design flexibility

Max. performance up to 50° C

Direct sunlight

Optimizing costs

Active Double Wall Cooling

Power stage replacement

The three-phase Fronius Tauro in the 50 and 100 kW power classes promises maximum performance for central systems even under the harshest conditions.

With its smart hardware design, it offers not just BOS cost optimization but unprecedented flexibility in system design. Simple installation and the fastest service on the market ensure maximum yield.

TECHNICAL DATA FRONIUS TAURO

INPUT DATA	TAURO 50-3-P	TAURO ECO 50-3-P	TAURO ECO 99-3-P	TAURO ECO 100-3-P
Number of MPP trackers	3		1	
Max. input current ($I_{dc\ max}$)	134 A	87.5 A	175 A	
Max. input current module field (PV1 / PV2 / PV3)	36 / 36 / 72 A	75 / 75 / - A	100 / 100 / - A	
Max. short circuit current (PV1/ PV2/ PV3)	72 / 72 / 125		125 / 125 / -	
Max. short circuit current ($I_{scmax,inverter}$)	240	178	250	
DC input voltage range ($U_{dc\ min}$ - $U_{dc\ max}$)	200 - 1,000 V		580 - 1,000 V	
Feed-in start voltage ($U_{dc\ start}$)	200 V		650 V	
Usable MPP voltage range ($U_{mpp\ min}$ - $U_{mpp\ max}$)	400 - 870 V		580 - 930 V	
Number of DC connections (PV1 / PV2 / PV3)	1 / 1 / 1		1 / 1 / -	
Max. PV generator power ($P_{dc\ max}$)	75 kW_{peak}		150 kW_{peak}	

OUTPUT DATA	TAURO 50-3-P	TAURO ECO 50-3-P	TAURO ECO 99-3-P	TAURO ECO 100-3-P
AC nominal output ($P_{ac,r}$)	50,000 W		99,990 W	100,000 W
Max. output power	50,000 VA		99,990 VA	100,000 VA
AC output current ($I_{ac\ nom}$)	76 A		152 A	
Grid connection ($U_{ac,r}$)	3~ NPE 400/230 V ; 3~ NPE 380/220 V			
Frequency (frequency range f_{min} - f_{max})	50 Hz / 60 Hz (45 - 65 Hz)			
Power factor (cos $\phi_{ac,r}$)	0 - 1 ind. / cap.			

GENERAL DATA	TAURO 50-3-P	TAURO ECO 50-3-P	TAURO ECO 99-3-P	TAURO ECO 100-3-P
Dimensions (height x width x depth)	755 x 1,109 x 346 mm (without wall mount)			
Weight	92 kg	74 kg	103 kg	
Degree of protection	IP 65			
Protection class	1			
Night-time consumption	< 16 W			
Cooling	Active cooling technology and double wall system			
Installation	Indoor and outdoor[1]			
Ambient temperature range	- 40 - + 65 °C [2]			
Certificates and compliance with standards[3]	AS/NZS 4777.2:2020, IEC62109-1/-2, VDE-AR-N 4105:2018, IEC62116, EN50549-1:2019 & EN50549-2:2019, VDE-AR-N 4110:2018, CEI 0-16:2019, CEI 0-21:2019			

[1] Direct under the sun is possible

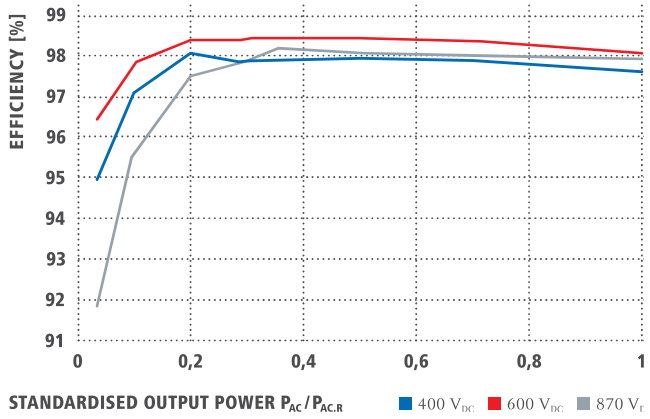
[2] Optional AC-disconnect mounted inside the inverter: from - 25 to + 65 °C

[3] These are planned certificates. For the current certificates, please see **www.fronius.com/tauro-cert**

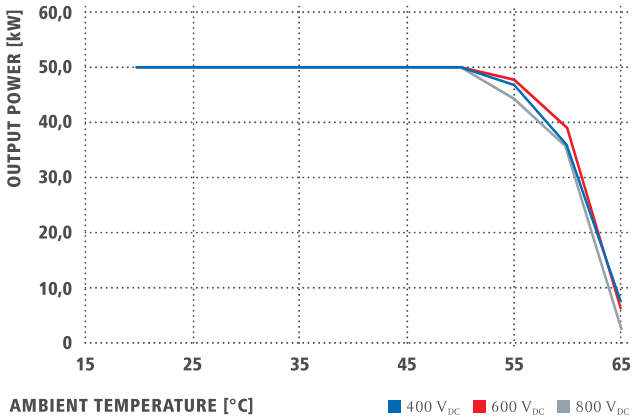
Direct variant.

EFFICIENCY	TAURO 50-3-D	TAURO ECO 50-3-D	TAURO ECO 99-3-D	TAURO ECO 100-3-D
Max. efficiency	98.6 %	98.5 %		
European efficiency (ηEU)	98.1 %	98.2 %		
MPP adaptation efficiency	> 99.9 %			

FRONIUS TAURO 50-3-D EFFICIENCY CURVE



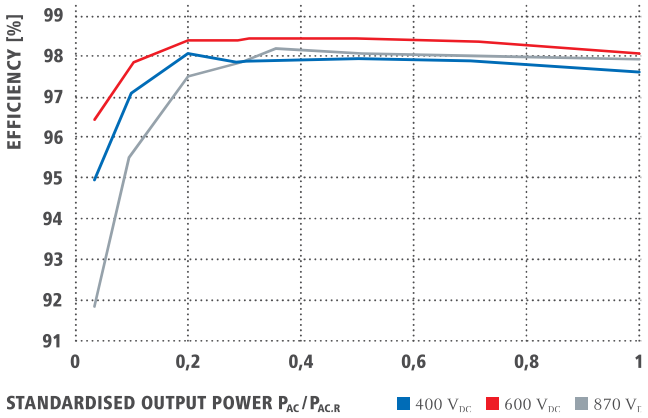
FRONIUS TAURO 50-3-D TEMPERATURE DERATING



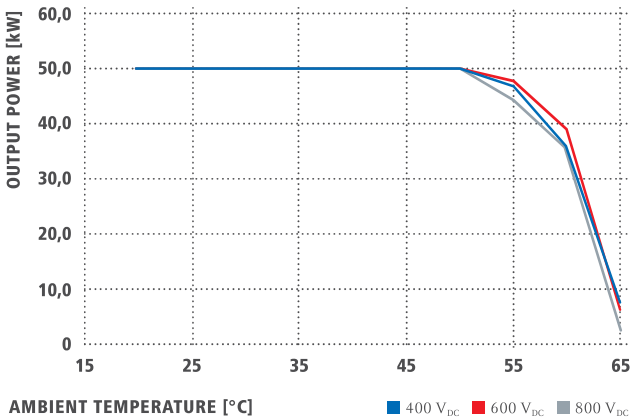
Precombined variant.

EFFICIENCY	TAURO 50-3-P	TAURO ECO 50-3-P	TAURO ECO 99-3-P	TAURO ECO 100-3-P
Max. efficiency	98.6 %	98.5 %		
European efficiency (ηEU)	98.1 %	98.2 %		
MPP adaptation efficiency	> 99.9 %			

FRONIUS TAURO 50-3-P EFFICIENCY CURVE



FRONIUS TAURO 50-3-P TEMPERATURE DERATING



HmT electrical

Fronius SYSTEMS PARTNER