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Certificate of compliance

Applicant: Fronius International GmbH
Günter Fronius Straße 1
4600 Wels
Austria

Product: Photovoltaic (PV) inverter

Model: Fronius Symo Advanced 12.5-3-M
Fronius Symo Advanced 15.0-3-M
Fronius Symo Advanced 17.5-3-M
Fronius Symo Advanced 20.0-3-M

Use in accordance with regulations:

The inverters are tested according the IEC 61683:1999, EN 61683:2000, DIN EN 61683:2000 procedure for measuring efficiency.

Applied rules and standards:

IEC 61683:1999, EN 61683:2000, DIN EN 61683:2000

Photovoltaic systems – Power conditioners – Procedure for measuring efficiency

At the time of issue of this certificate, the representative product listed above corresponds to the stated rules and standards.

Report number: 21TH0549-SymoAV-12.5-20-IEC61683_0 **Certification program:** NSOP-0032-DEU-ZE-V01
Certificate number: U22-0552 **Date of issue:** 2022-09-21

Certification body



Certification body of Bureau Veritas Consumer Products Services Germany GmbH Accredited according to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written permission of Bureau Veritas Consumer Products Services Germany GmbH

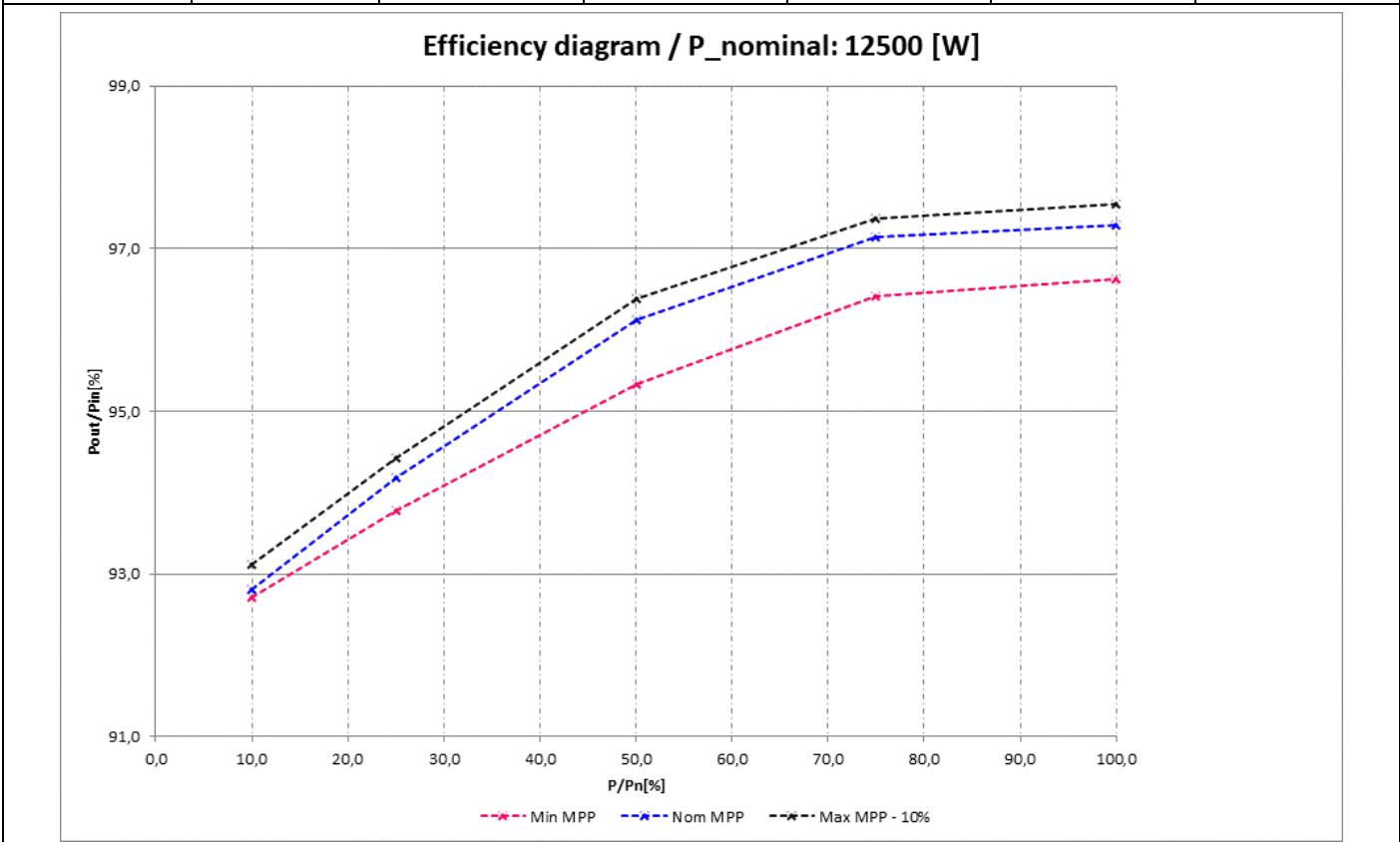


Appendix

Extract from test report according the IEC 61683 Nr. 21TH0549-SymoAV-12.5-20-IEC61683_0

Efficiency measurement conditions test results

Fronius Symo Advanced 12.5-3-M						
Input voltage [Vdc]		Power in [W] (nom. 12,5 kW)				
		10%	25%	50%	75%	100%
		1250	3750	7500	11250	12500
		η in [%]				
V _{min}	330V	92,7	93,8	95,3	96,4	96,6
V _{nominal}	600V	92,8	94,2	96,1	97,1	97,3
V _{max (MPPT)}	800V	93,1	94,4	96,4	97,4	97,5



Note:

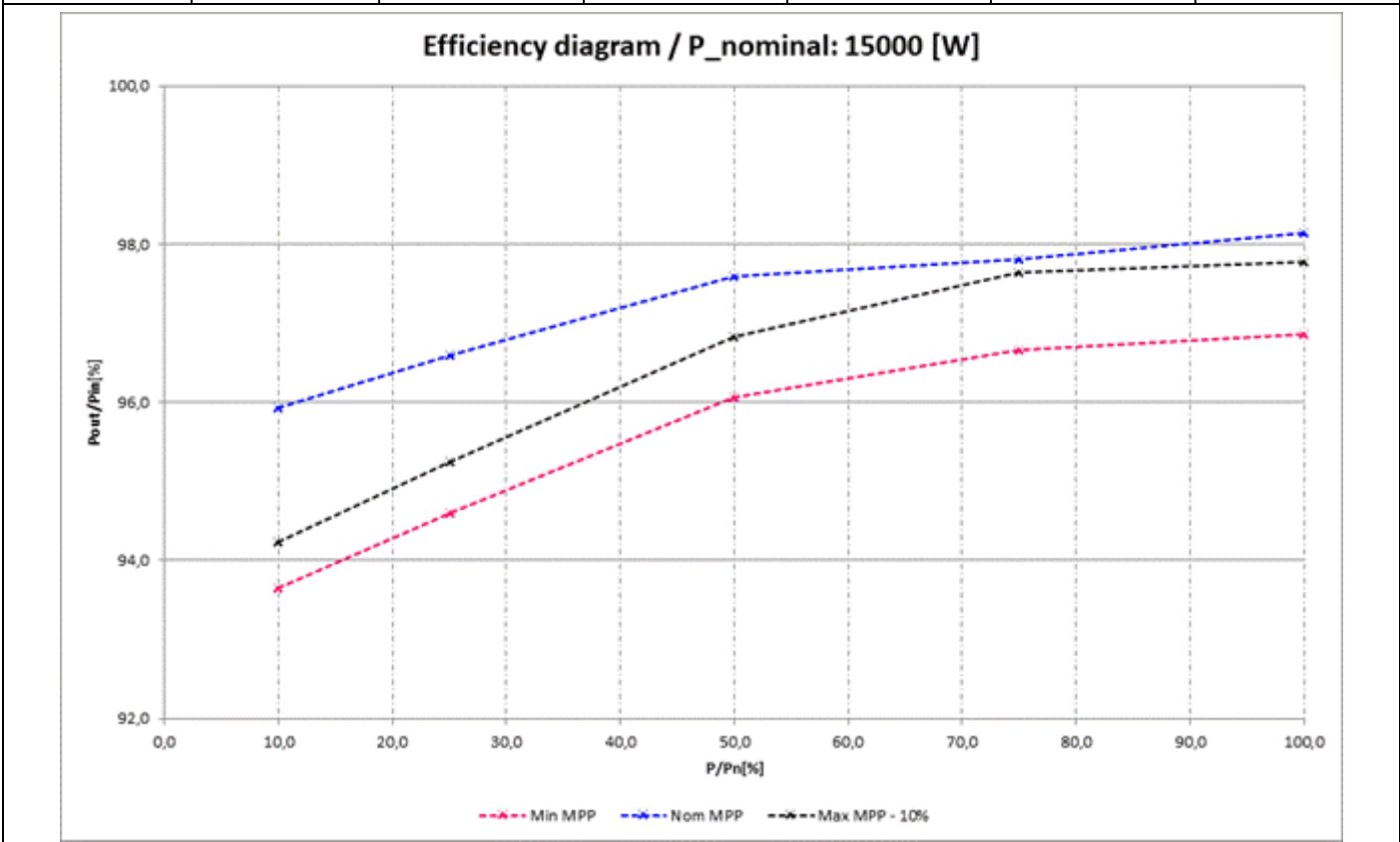


Appendix

Extract from test report according the IEC 61683 Nr. 21TH0549-SymoAV-12.5-20-IEC61683_0

Efficiency measurement conditions test results

Fronius Symo Advanced 15.0-3-M						
Input voltage [Vdc]		Power in [W] (nom. 15 kW)				
		10%	25%	50%	75%	100%
		1500	3750	7500	11250	15000
		η in [%]				
V _{min}	330V	93,6	94,6	96,1	96,7	96,9
V _{nominal}	600V	95,9	96,6	97,6	97,8	98,1
V _{max} (MPPT)	800V	94,2	95,3	96,8	97,6	97,8



Note:



Annex to the IEC 61683 certificate of compliance No. U22-0552

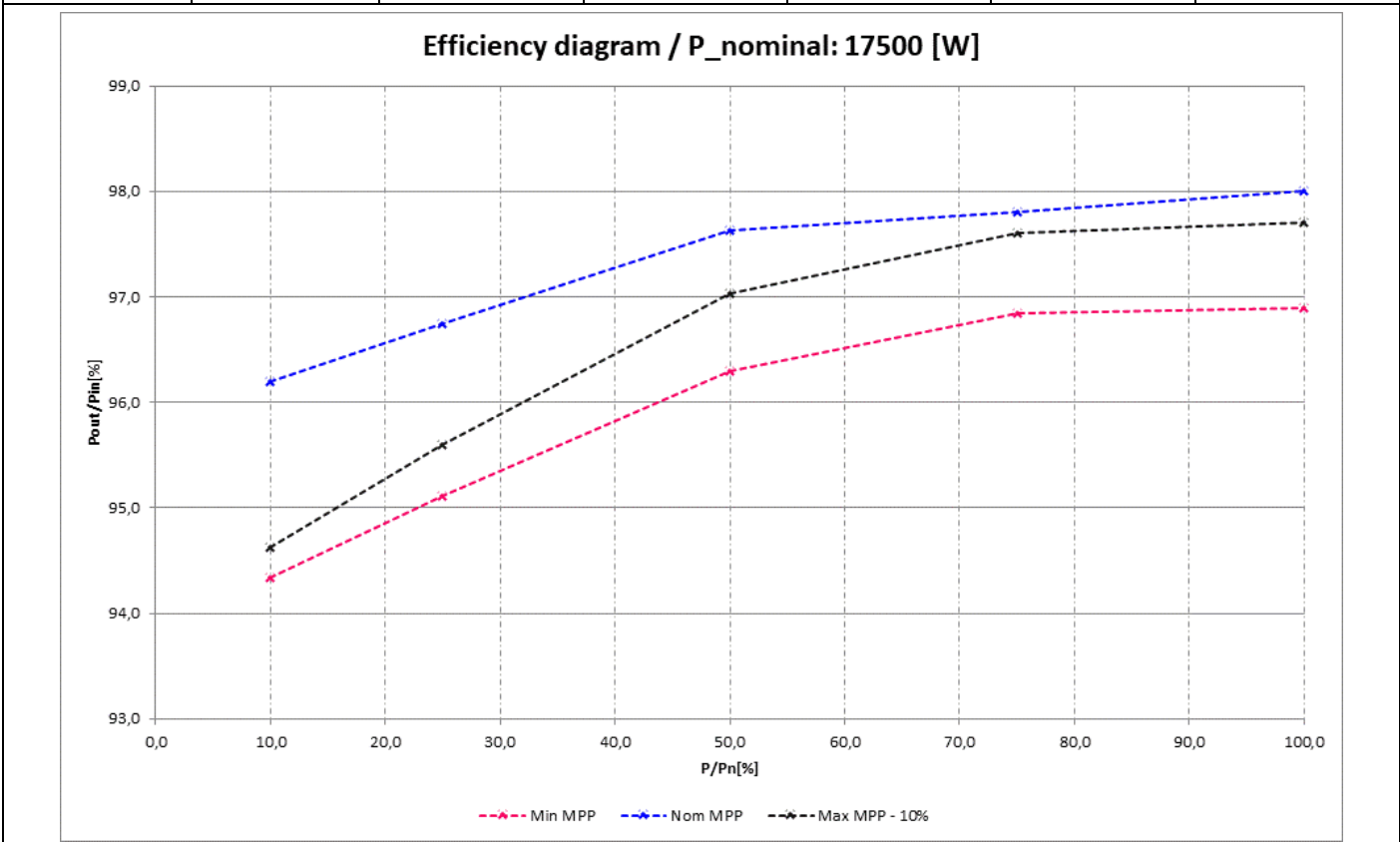
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Appendix

Extract from test report according the IEC 61683 Nr. 21TH0549-SymoAV-12.5-20-IEC61683_0

Efficiency measurement conditions test results

Fronius Symo Advanced 17.5-3-M						
Input voltage [Vdc]		Power in [W] (nom. 17,5 kW)				
		10%	25%	50%	75%	100%
		1750	4375	8750	13125	17500
		η in [%]				
V _{min}	370V	94,3	95,1	96,3	96,8	96,9
V _{nominal}	600V	96,2	96,7	97,6	97,8	98,0
V _{max (MPPT)}	800V	94,6	95,6	97,0	97,6	97,7



Note:



Appendix

Extract from test report according the IEC 61683

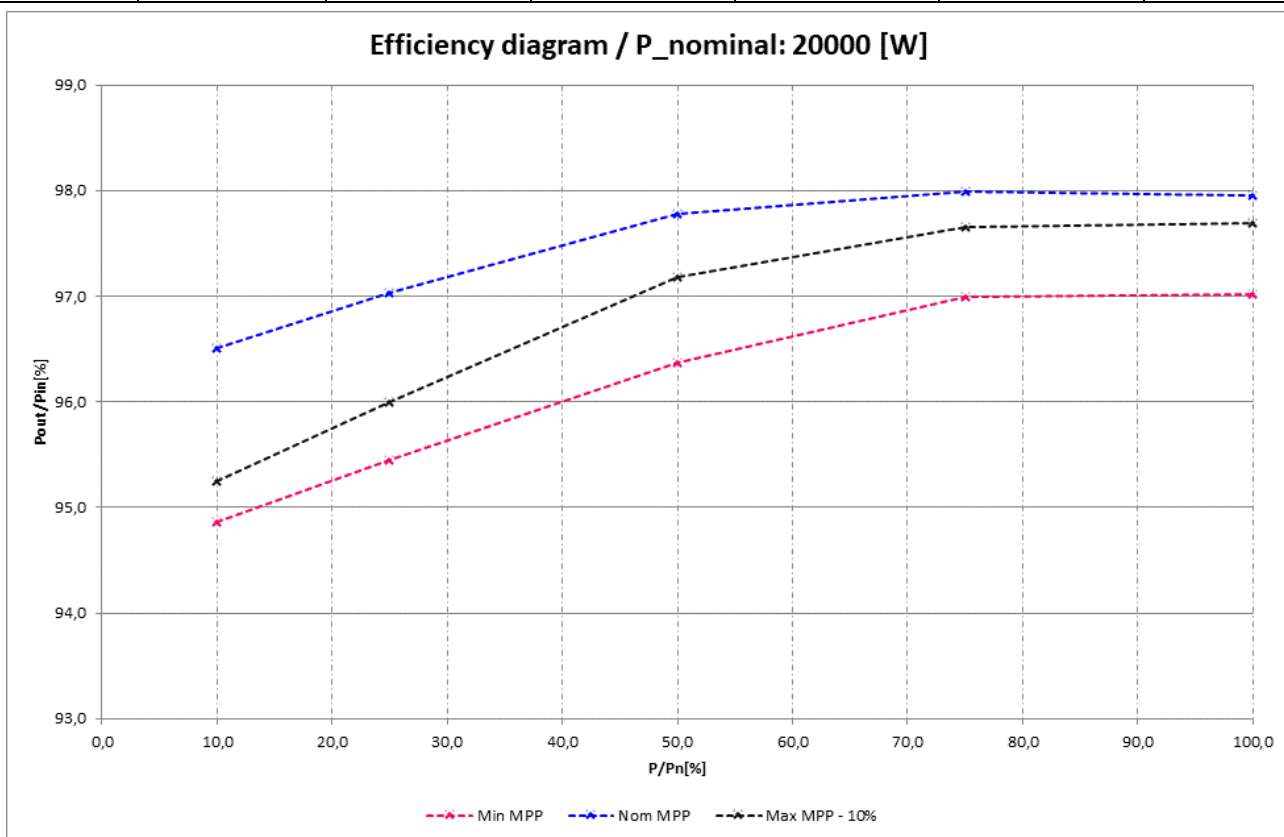
Nr. 21TH0549-SymoAV-12.5-20-IEC61683_0

Efficiency measurement conditions test results

Fronius Symo Advanced 20.0-3-M

Input voltage [Vdc]		Power in [W] (nom. 20 kW)				
		10%	25%	50%	75%	100%
		2000	5000	10000	15000	20000
		η in [%]				
V _{min}	420V	94,9	95,5	96,4	97,0	97,0
V _{nominal}	600V	96,5	97,0	97,8	98,0	98,0
V _{max} (MPPT)	800V	95,2	96,0	97,2	97,7	97,7

Efficiency diagram / P_{nominal}: 20000 [W]



Note: