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March 9th, 2018

SUBJECT: PVSYST Settings for CPS Inverters with KVA Overhead (50KW/55KVA; 60KW/66KVA; 100KW/111KVA; 125KW/132KVA)

The accuracy of PVSYS production simulations depend on additional settings not contained in the OND file. The settings are located in the "Optional" section of the "Input Parameters" Screen – see screen shot below. In the "Optional" section, the "Miscellaneous Tools" button will open a dialog box with multiple tabs. The "Power Factor" and "Grid Power Limitation" Tabs must be configured as shown below (with the appropriate level and phase of the desired Power Factor) to achieve accurate production simulations. The sections highlighted in yellow must be configured as shown or else the simulation may produce more Real Power than is available from the inverter.

Variant n*		Inverter temperature Power factor Grid power limitation
put parameters Mandatory	Optional	Power factor (cos phi)
Orientation	Horizon	Use Power factor for grid injection
System	Near Shadings	Power factor = cos(phi) 1.000 (* Lead
Detailed losses	Module layout	Tan (phi) (yearly)
Self-consumption	C Economic ev.	Define monthly values
	Miscellaneous tools	C Apparent power [kVA]
		Active power [kW]
stem Variant (calcula	ation version)	
rstem Variant (calcula Variant n*	ation version)	Miscellaneous tools Inverter temperature Power factor Grid power limitat
	ation version)	
Variant n°	ation version)	Inverter temperature Power factor Grid power limitat Power Limitation Uses grid power limitation
Variant n*		Inverter temperature Power factor Grid power limitat
Variant n*	Optional	Inverter temperature Power factor Grid power limitation Power Limitation Uses grid power limitation AS REQUIRED Grid Power limitation 66.0 k Actual installed AC Power 60.0 k
Variant n* Mandatory Orientation System	Optional Horizon Near Shadings	Inverter temperature Power factor Grid power limitat Power Limitation Uses grid power limitation AS REQUIRED Grid Power limitation 66.0 k
Variant n*	Optional Horizon	Inverter temperature Power factor Grid power limitation Power Limitation Uses grid power limitation Grid Power limitation Grid Power limitation Actual installed AC Power
Variant n* Mandatory Orientation System	Optional Horizon Near Shadings	Inverter temperature Power factor Grid power limitation Power Limitation Uses grid power limitation AS REQUIRED Grid Power limitation 66.0 k Actual installed AC Power 60.0 k Nominal Array PV Power 87.8 Power ratio 1.330
Variant n* Mandatory Orientation System Detailed losses	Optional Horizon Near Shadings Module layout Economic oval	Inverter temperature Power factor Grid power limitation Verter temperature Power factor Grid power limitation Grid Power limitation G6.0 k Actual installed AC Power 60.0 k Nominal Array PV Power 87.8 k Power ratio 1.330 C Limit applied at the inverter level
Variant n* Mandatory Orientation System Detailed losses	Optional Horizon Near Shadings Module layout	Inverter temperature Power factor Grid power limitation Power Limitation Uses grid power limitation Astractual installed AC Power 60.0 k Actual installed AC Power 87.8 k Power 87.8 k Power ratio 1.330 Limit applied at the invector point Specified Power factor C Limit in active power
Variant n* Mandatory Orientation System Detailed losses	Optional Horizon Near Shadings Module layout Economic oval	Inverter temperature Power factor Grid power limitation Uses grid power limitation Grid Power limitation Grid Power limitation Cactual installed AC Power 60.0 k Actual installed AC Power 60.0 k Cominal Array PV Power 87.8 k Power ratio 1.330 Curinit applied at the inverter level Curinit applied at the injection point Specified Power factor

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