Product name:
Project: P100001015

Board serialnumber:

Date of testing:

Test condition	AC Input	DC Output	AC values	DC values	Condition	Yes	No
Software Upload							
Initial check 3-phase	230VAC(L-N) 400VAC(L-L) = ON	DC output = OFF	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 0.5A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 1A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 2A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 4A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 6A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Three-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 7A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Initial check 1-phase	230VAC(L-N) 400VAC(L-L) = ON	DC output = OFF	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 0.5A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 1A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 2A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 4A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 6A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		
Mono-phase AC supply	230VAC(L-N) 400VAC(L-L) = ON	DC output = 785V, 7A	Phase voltages (RMS, L-N): Total AC power:	DC voltage, DC current: Total DC power:	EFF > 97.2%		

Name of the test engineer:

Signature of test engineer:

Settings are in gray coloms

Checkpoints are in white

 # If one checkpoint is not passed, rework of the board is needed

1 Test setup for P100001015

1.1 Schematics

Figure 1 shows the test setup to validate the board in 3-phase PFC mode operaton. Cables connecting Phase A/B/C terminals of AC source to L1/L2/L3 terminals on the board are rated for atleast 16A RMS. The Neutral terminal of the AC source and on the board are left unconnected. V+ and V- terminals on the board are to be connected to the DC+ and DC- terminals of the DC load using 16A RMS cables. All PE terminals in the setup are connected together for safety reasons.

Note: avoid getting in close contact with the board during testing.

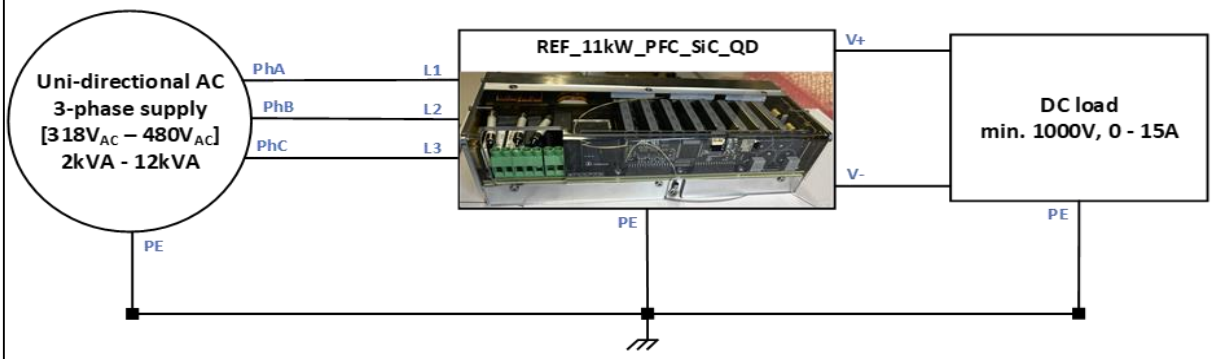


Figure 1: Test setup in 3-phase PFC mode

Figure 2 shows the test setup to validate the board in 1-phase PFC mode operaton. Cables connecting 'Ph' and 'N' terminals of AC source to L1/L2/L3/N terminals on the board are rated for atleast 32A RMS. Each 32A cable from the AC source is split into two equal 16A short length (max. 10-15cm) cables near to the board and are inserted into L1 & L2 terminals for 'Ph' cable and L3 & N terminals for 'N' cable. V+ and V- terminals on the board are to be connected to the DC+ and DC- terminals of the DC load using 16A RMS cables. All PE terminals in the setup are connected together for safety reasons.

Note: avoid getting in close contact with the board during testing.

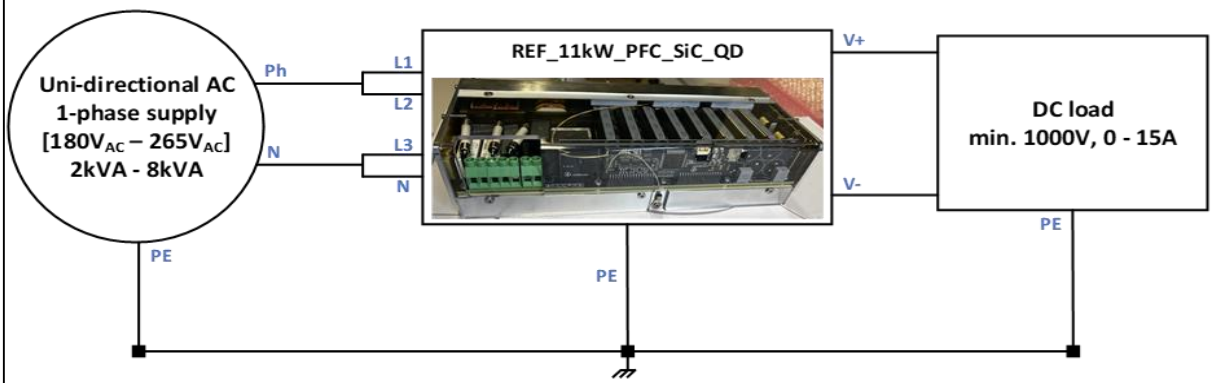


Figure 2: Test setup in 1-phase PFC mode

Figure 3: AC grid side wiring assembly for 1-phase testing