



Product Change Notice

PCN #: VE20251126

Date: November 26th, 2025

To Our Valued Customers:

We appreciate your use of Vicor power modules. The purpose of this notice is to inform of a specification change to **MBCM270x450x270A00**

PCN Type:

Design change to accommodate additional MOSFET supplier.

Product(s) Affected: MBCM270F450M270A00 and MBCM270T450M270A00

Datasheet Electrical Specification Changes:

The electrical specification changes below are incorporated into the product datasheet Revision 1.4.

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Output resistance	R_{OUT_COLD}	$I_{OUT} = 6.25A$, $T_{CASE} = -55^{\circ}C$	60.0	82.0	110	mΩ
	R_{OUT_AMB}	$I_{OUT} = 6.25A$, $T_{CASE} = 25^{\circ}C$	100	122	150	
	R_{OUT_HOT}	$I_{OUT} = 6.25A$, $T_{CASE} = 100^{\circ}C$	130	158	190	

Revised Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Output resistance	R_{OUT_COLD}	$V_{IN} = 270V$, $I_{OUT} = 6.25A$, $T_{CASE} = -55^{\circ}C$	60.0	94	110	mΩ
	R_{OUT_AMB}	$V_{IN} = 270V$, $I_{OUT} = 6.25A$, $T_{CASE} = 25^{\circ}C$	100	136	170	
	R_{OUT_HOT}	$V_{IN} = 270V$, $I_{OUT} = 6.25A$, $T_{CASE} = 100^{\circ}C$	130	235	275	

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (Ambient)	η_{AMB}	$V_{IN} = 270V$, $I_{OUT} = 6.25A$; $T_{CASE} = 25^{\circ}C$	94.5	96.0		%
	η_{AMB}	$V_{IN} = 270V$, $I_{OUT} = 3.13A$; $T_{CASE} = 25^{\circ}C$	93.5	95.2		

Revised Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (Ambient)	η_{AMB}	$V_{IN} = 270V$, $I_{OUT} = 6.25A$; $T_{CASE} = 25^{\circ}C$	94.5	96.4		%
	η_{AMB}	$V_{IN} = 270V$, $I_{OUT} = 3.13A$; $T_{CASE} = 25^{\circ}C$	93.5	95.7		

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (Hot)	η_{HOT}	$V_{IN} = 270V, I_{OUT} = 6.25A; T_{CASE} = 100^{\circ}C$	94.0	95.6		%

Revised Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (Hot)	η_{HOT}	$V_{IN} = 270V, I_{OUT} = 6.25A; T_{CASE} = 100^{\circ}C$	94.0	95.1		%

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
No load power dissipation	P_{NL}	$V_{IN} = 270V, T_{CASE} = 25^{\circ}C$		7	10	W

Revised Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
No load power dissipation	P_{NL}	$V_{IN} = 270V, T_{CASE} = 25^{\circ}C$		4.4	10	W

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
DC input current	I_{IN_DC}	At $P_{OUT} = 350W$			1.37	A

Revised Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
DC input current	I_{IN_DC}	At $P_{OUT} = 350W$			1.45	A

The below denotes a datasheet correction and not a change in product performance:

Existing Rev 1.3:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (over load range)	$\eta_{20\%}$	$1.25A < I_{OUT} < 6.25A$	90			%

Corrected Rev 1.4:

General Powertrain						
Attribute	Symbol	Conditions / Notes	Min	Typ	Max	Unit
Efficiency (over load range)	$\eta_{20\%}$	$1.25A < I_{OUT} < 6.25A$	75			%

Effective Dates:

Effective Immediately

Actions Required:

Customers should note the change in output resistance could effect current sharing when using a mix of old and new parts in array applications.

Customers can contact Product Management with any questions or concerns.

Company Contact:

Product Management
Vicor Corporation
25 Frontage Road
Andover, MA 01810
(978) 470-2900