

PHOENIX CONTACT Electronics GmbH
Dringenauer Straße 30
31812 Bad Pyrmont, Germany

Article variant declaration for:

Art. No.	Article Name	Type of Coupler	Remark
1433047	NEARFI 200 B	Base	tested
1433046	NEARFI 200 R	Remote	
1464614	NEARFI 300 B	Base	Variant of NEARFI 200 B
1509989	NEARFI 300 R	Remote	Variant of NEARFI 200 R

Declaration of article variants and combining them into systems NEARFI 200 B and NEARFI 200 R

The NearFi couplers are transmitting power contact-free over an air gap of a few centimeters. For contactless transmission at least two devices are needed: a base coupler and a remote coupler. The power transmission is a unidirectional transmission from the base coupler (power transmitter) to the remote coupler (power receiver).

Devices under Test in a system:

<u>Coupler type</u>	<u>Model Name</u>	<u>Art.-No.</u>
Base	NEARFI 200 B	1433047
Remote	NEARFI 200 R	1433046

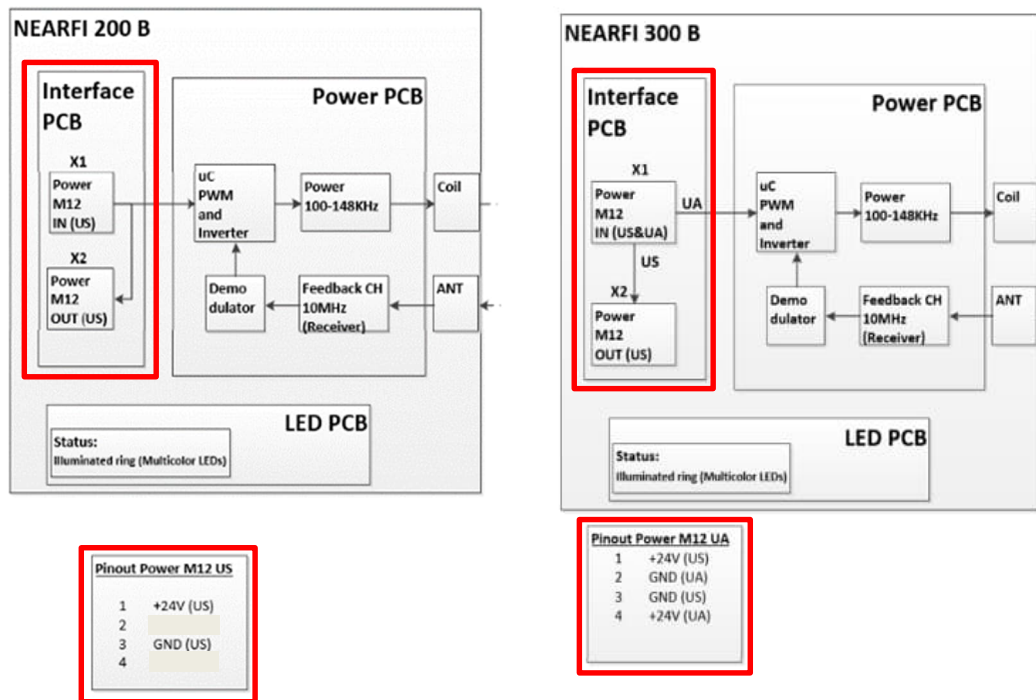
Variant of NEARFI 200 B:

	<u>Model Name</u>	<u>Art.-No.</u>
Device under test	NEARFI 200 B	1433047
Variant	NEARFI 300 B	1464614

Difference between Device under Test and Variant

The base couplers differ in pinout of X1 of the supply voltage and the voltage which is made available at X2 on the interface PCB (see Block diagram). In one case UA is transmitted, in the other case US is transmitted. The technical specifications of US and UA are identical. The wireless power transmission and all other circuit parts are identical.

According to use of radio spectrum in order to avoid harmful interference, the coupler NEARFI 300 B can be regarded as a variant of NEARFI 200 B, and does not need to be measured separately, again.



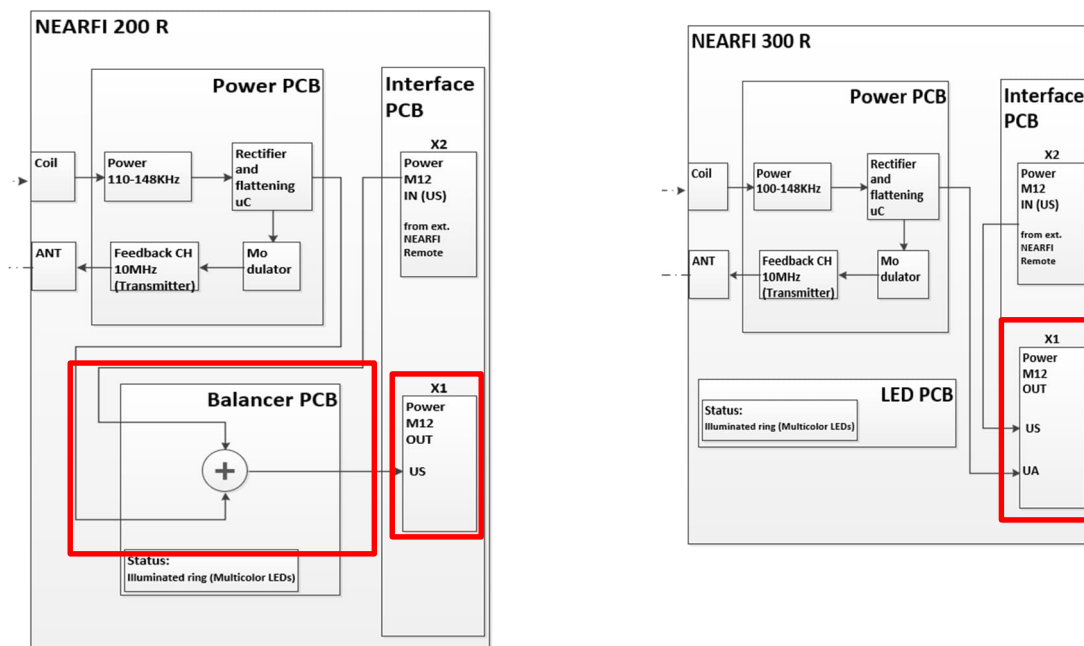
Variant of NEARFI 200 R:

	<u>Model Name</u>	<u>Art.-No.</u>
Device under test	NEARFI 200 R	1433046
Variant	NEARFI 300 R	1509989

Difference between Device under Test and Variant

The difference of the remote coupler is a balancer circuit in the NEARFI 200 R. With the help of the balancer, it is possible to connect another voltage source to port X2 (US) and thus double the total power output at X1 (US). The maximum power that can be transmitted via the wireless power transfer (WPT) is limited to 50W and this is the same for both couplers NEARFI 200 R and NEARFI 300 R. In the coupler NEARFI 300 R, the balancer circuit is not assembled (same printed circuit board) and the external voltage which is fed to socket X2 (US) is made available directly on separate pins on X1 (US). The transmitted voltage from the wireless power transfer is made available at connector X1 as UA. The two voltages are available on separate pins and are not combined as with the NEARFI 200 R.

Due to the reduced circuit in the DC part of the NEARFI 300 R, and the consideration according to use of radio spectrum in order to avoid harmful interference, the coupler NEARFI 300 R can be regarded as a variant of NEARFI 200 B, and does not need to be measured separately, again.



Bad Pyrmont, 18 September 2025



Maik Stemme