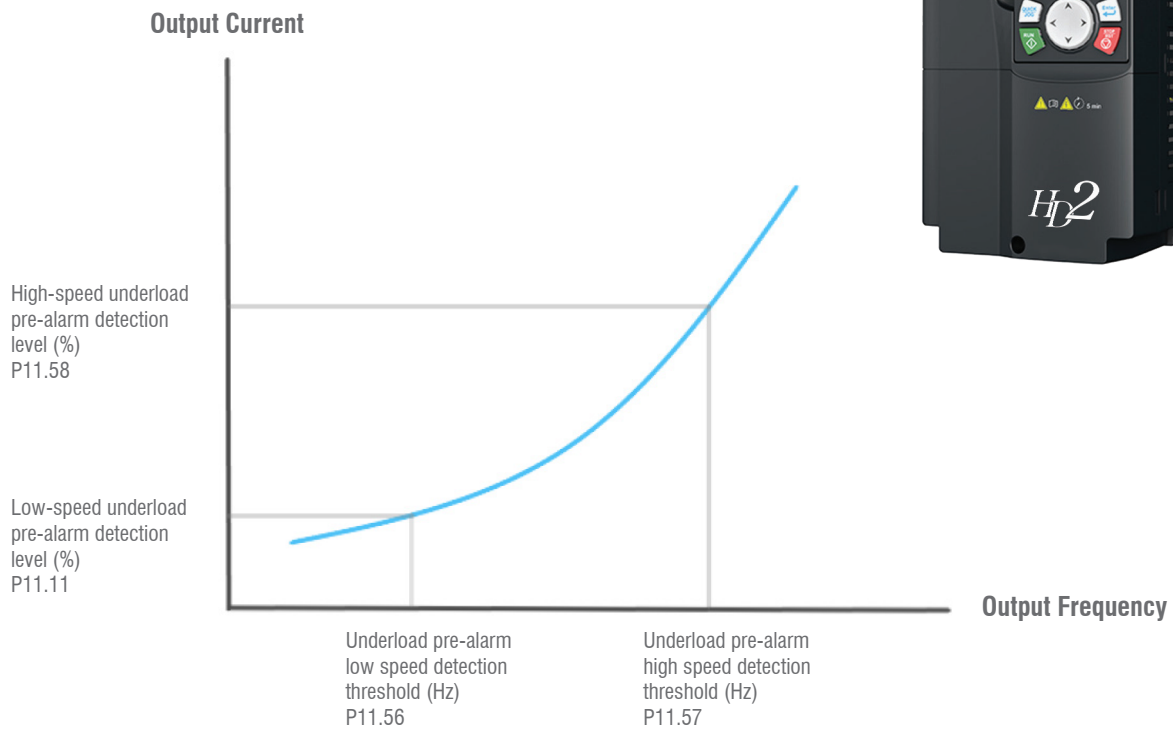


HD2 Variable Speed Inverter Drives

Underload Function - Feature Guide



The underload function in the HD2 series inverters is to protect the pump, fans, or motor from running under low load conditions. The underload detection is based on the output frequency and output current. Since fans and pumps are variable torque loads, the current and power consumption will vary based on the frequency (speed). Please see below the graph, which shows the relation between the output current and output frequency.



In addition to the four parameters mentioned in the graph, there is one more parameter P11.12 which is to configure the delay before the underload trip alarm.

Parameters Setup

Function Code	Name	Description	Default Value	Modify
P11.11	Low-speed underload pre-alarm detection level	0~P11.09	50%	◦
P11.12	Underload pre-alarm detection time	0.1~3600.0s	1.0s	◦
P11.56	Underload pre-alarm low speed detection threshold	P00.05~P11.57	20.00Hz	◦
P11.57	Underload pre-alarm high speed detection threshold	P11.56~P00.03	50.00Hz	◦
P11.58	High-speed underload pre-alarm detection level	P11.11~P11.09	80%	◦