

## Recommended Breaker Sizes

Phase Converters & Variable Frequency Drives (VFDs)

### PHASE PERFECT®

Digital Phase Converter

#### Phase Perfect® - PTE Models | [NEW FOR 2021](#)

PTE - Phase Perfect® - 240 V Models		
Model	Horsepower	Recommended Breaker Size
PTE007R	7.5 HP	60 A
PTE007RQT	7.5 HP	60 A
PTE010R	10 HP	80 A
PTE010RQT	10 HP	80 A
PTE015R	15 HP	125 A
PTE020R	20 HP	150 A

PTE - Phase Perfect® - 480 V Models		
Model	Horsepower	Recommended Breaker Size
PTE407R	7.5 HP	30 A
PTE407RQT	7.5 HP	30 A
PTE410R	10 HP	40 A
PTE410RQT	10 HP	40 A
PTE415RQT	15 HP	60 A
PTE420RQT	20 HP	70 A

PTE - Phase Perfect® - 240 V to 480 V Models <i>Voltage Doubling™ - Only by Phase Technologies</i>		
Model	Horsepower	Recommended Breaker Size
PTE207R	7.5 HP	60 A
PTE210R	10 HP	80 A
PTE215R	15 HP	125 A
PTE220R	20 HP	150 A

#### Phase Perfect® - Original Models

Phase Perfect® - 240 V Models		
Model	Horsepower	Recommended Breaker Size
PT007/PTE007	7.5 HP	60 A
PT010/PTE010	10 HP	80 A
PT020	20 HP	150 A
PT030	30 HP	225 A
PT040	40 HP	300 A
PT050	50 HP	400 A
PT060	60 HP	450 A
PT075	75 HP	600 A

Phase Perfect® - 480 V Models		
Model	Horsepower	Recommended Breaker Size
PT407/PTE407	7 HP	30 A
PT410/PTE410	10 HP	40 A
PT415/PTE415	15 HP	60 A
PT420/PTE420	20 HP	70 A
PT430	30 HP	100 A
PT440	40 HP	150 A
PT450	50 HP	175 A
PT460	60 HP	200 A
PT475	75 HP	250 A
PT4100	100 HP	400 A

## Recommended Breaker Sizes – Variable Frequency Drives

<b>ES3R</b>		
Motor HP	Input Current	Recommended Breaker Size
<b>120 V</b>		
1/3	8 A	10 A
1/2	12 A	15 A
1	24 A	30 A
<b>240 V</b>		
1/2	6 A	10 A
3/4	9 A	15 A
1	12 A	15 A
1 1/2	18 A	25 A
2	24 A	30 A

<b>SD Series</b>		
Model	Horsepower	Recommended Breaker Size
SD002	2 HP	25 A
SD003	3 HP	40 A
SD005	5 HP	55 A

<b>SDE Series</b>		
Model	Horsepower	Recommended Breaker Size
SDE007	7.5 HP	80 A
SDE010	10 HP	100 A
SDE015	15 HP	120 A
SDE405	5 HP	40 A
SDE407	7.5 HP	60 A
SDE410	10 HP	60 A
SDE415	15 HP	80 A

<b>2XD Series</b>		
Model	Horsepower	Recommended Breaker Size
2XD205	5 HP	40 A
2XD207	7.5 HP	65 A
2XD210 Discontinued Model	10 HP	80 A
2XD215 Discontinued Model	15 HP	110 A

<b>DX Series</b>		
<b>Model</b>	<b>Horsepower</b>	<b>Recommended Breaker Size</b>
DXE005	5 HP	30 A
DXE007	7 HP	30 A
DXE010	10 HP	40 A
DXE015	15 HP	60 A
DXE020	20 HP	80 A
DXE025	25 HP	100 A
DXE030	30 HP	125 A
DXE405	5 HP	20 A
DXE407	7 HP	20 A
DXE410	10 HP	30 A
DXE415	15 HP	30 A
DX420/DXS420/DXE420	20 HP	40 A
DXE425	25 HP	50 A
DX430/DXS430/DXE430	30 HP	60 A
DX440/DXS440/DXE440	40 HP	80 A
DX450/DXS450/DXE450	50 HP	100 A
DX460/DXS460	60 HP	125 A
DX475/DXS475	75 HP	150 A
DX4100/DXS4100	100 HP	200 A
DX4125/DXS4125	125 HP	225 A
DX4150/DXS4150	150 HP	250 A
DX4200/DXS4200	200 HP	350 A
DX4250	250 HP	400 A
DX4300	300 HP	500 A
DX4350	350 HP	600 A
DX4400	400 HP	600 A
DX4450	450 HP	700 A
DX4500	500 HP	800 A

<b>3LH Series</b>		
<b>Model</b>	<b>Horsepower</b>	<b>Recommended Breaker Size</b>
3LHE005	5 HP	30 A
3LHE007	7 HP	30 A
3LHE010	10 HP	40 A
3LHE015	15 HP	60 A
3LHE020	20 HP	80 A
3LHE025	25 HP	100 A
3LHE030	30 HP	125 A
3LHE205	5 HP	30 A
3LHE207	7 HP	30 A
3LHE210	10 HP	40 A
3LHE215	15 HP	60 A
3LH220/3LHS220/3LHE220	20 HP	80 A
3LHE225	25 HP	100 A
3LH230/3LHS230	30 HP	125 A
3LH240/3LHS240	40 HP	175 A
3LH250/3LHS250	50 HP	200 A
3LHE405	5 HP	20 A
3LHE407	7 HP	20 A
3LHE410	10 HP	30 A
3LHE415	15 HP	30 A
3LH420/3LHS420/3LHE420	20 HP	40 A
3LHE425	25 HP	60 A
3LH430/3LHS430/3LHE430	30 HP	60 A
3LH440/3LHS440/3LHE440	40 HP	80 A
3LH450/3LHS450/3LHE450	50 HP	100 A
3LH460/3LHS460	60 HP	125 A
3LH475/3LHS475	75 HP	150 A
3LH4100/3LHS4100	100 HP	200 A
3LH4125/3LHS4125	125 HP	250 A
3LH4150/3LHS4150	150 HP	250 A
3LH4200/3LHS4200	200 HP	350 A
3LH4250	250 HP	400 A
3LH4300	300 HP	500 A
3LH4350	350 HP	600 A
3LH4400	400 HP	600 A
3LH4450	450 HP	700 A
3LH4500	500 HP	800 A

<b>1LH Series</b>		
<b>Model</b>	<b>Horsepower</b>	<b>Recommended Breaker Size</b>
1LHE005	5 HP	40 A
1LHE007	7 HP	60 A
1LHE010	10 HP	60 A
1LHE015	15 HP	100 A
1LHE020	20 HP	125 A
1LHE205	5 HP	40 A
1LHE207	7 HP	60 A
1LHE210	10 HP	70 A
1LHE215	15 HP	100 A
1LH220/1LHS220/1LHE220	20 HP	125 A
1LH220C	20 HP	200 A
1LH220X	20 HP	250 A
1LHE225	25 HP	150 A
1LH230/1LHS230	30 HP	175 A
1LH230C	30 HP	250 A
1LH230X	30 HP	350 A
1LH240/1LHS240	40 HP	250 A
1LH240C	40 HP	350 A
1LHE250	50 HP	300 A
1LHE405	5 HP	20 A
1LHE407	7 HP	30 A
1LHE410	10 HP	40 A
1LHE415	15 HP	60 A
1LH420/1LHS420/1LHE420	20 HP	60 A
1LH420C	20 HP	100 A
1LH420X	20 HP	125 A
1LHE425	25 HP	80 A
1LH430/1LHS430/1LHE430	30 HP	100 A
1LH430C	30 HP	125 A
1LH430X	30 HP	175 A
1LH440/1LHS440	40 HP	125 A
1LH440C	40 HP	175 A
1LH440X	40 HP	200 A
1LH450/1LHS450	50 HP	175 A
1LH450C	50 HP	200 A
1LH450X	50 HP	250 A
1LH460/1LHS460	60 HP	200 A
1LH460C	60 HP	250 A
1LH460X	60 HP	250 A
1LH475/1LHS475	75 HP	250 A
1LH475C	75 HP	250 A
1LH475X	75 HP	350 A
1LH4100/1LHS4100	100 HP	300 A
1LH4100C	100 HP	350 A
1LH4125	125 HP	350 A