

# cliQ™ (24 V)



- Power will not de-rate for the entire input voltage range
- High Efficiency > 90.0% @ 230 V<sub>AC</sub>
- Power Boost of 150% up to 5 s (480 W: 200% for 2 s)
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

## Applications



Process Automation   Factory Automation   Machine Automation   Renewable Energy

Output	DRP024V060W1B□	DRP024V120W1B□	DRP024V240W1B□	DRP024V480W1B□			
Output Voltage	24 V	24 V	24 V	24 V			
Output Voltage Range	24-28 V	24-28 V	24-28 V	24-28 V			
Output Current	0-2.5 A	0-5.0 A	0-10.0 A	0-20.0 A			
Output Power	60 W	120 W	240 W	480 W			
PARD (20 MHz)	< 150 mVpp						
Hold-up Time	115 V <sub>AC</sub> 230 V <sub>AC</sub> > 125 ms	> 20 ms 115 ms	> 20 ms				
Input							
Phase Input	Single Phase						
Input Voltage Range	85-264 V <sub>AC</sub> (DC input range 120-375 V <sub>DC</sub> ) <sup>1)</sup>						
Input Frequency	47-63 Hz						
Input Current	115 V <sub>AC</sub> < 1.4 A 230 V <sub>AC</sub> < 0.8 A	< 2.2 A < 1.1 A	< 2.5 A < 1.3 A	< 5.0 A < 3.0 A			
Efficiency <sup>2)</sup> at 100% Load	115 V <sub>AC</sub> > 90.0% 230 V <sub>AC</sub>	> 89.0% > 90.0%	> 90.0%	> 91.0% > 92.0%			
Max Inrush Current (Cold Start)	115 V <sub>AC</sub> < 20 A 230 V <sub>AC</sub> < 35 A	< 35 A					
Power Factor	115 V <sub>AC</sub> 230 V <sub>AC</sub>	Conform to EN 61000-3-2	> 0.96 > 0.90	> 0.96 > 0.95			
Leakage Current	240 V <sub>AC</sub>	< 1 mA					
<b>Mechanical</b>							
Case Cover / Chassis	Aluminium						
Dimensions (H × W × D)	mm 121 × 32 × 125 inch 4.76 × 1.26 × 4.92	121 × 50 × 123.1 4.76 × 1.97 × 4.85	121 × 85 × 124.1 4.76 × 3.35 × 4.89	121 × 144 × 118.6 4.76 × 5.67 × 4.67			
Unit Weight	kg 0.37 lb 0.82	0.72 1.59	1.10 2.43	1.37 3.02			
Cooling System	Convection						
MTBF <sup>3)</sup>	> 800,000 hrs						
<b>Environment</b>							
Operating Temperature <sup>4)</sup>	-25°C to +80°C						
Storage Temperature	-40°C to +85°C						
Operating Humidity	5 to 95% RH (Non-Condensing)						
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)						

## Dimensions Reference



### Notes

- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V060W1B□ is also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# cliQ™ (24 V)



- Power will not de-rate for the entire input voltage range
- UL 1310 safety approval
- NEC Class 2 and Limited Power Source (LPS) approvals
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (DRP024V060W1NY)

## Applications



Output	DRP024V060W1N□	DRP-24V100W1NN
Output Voltage	24 V	24 V
Output Voltage Range	22-28 V	22-24 V
Output Current	0-2.5 A	0-3.8 A
Output Power	60 W	91.2 W
PARD (20 MHz)	< 240 mVpp	< 150 mVpp
Hold-up Time	115 V <sub>AC</sub> > 20 ms 230 V <sub>AC</sub> > 125 ms	> 20 ms > 30 ms
Input		
Phase Input	Single Phase	
Input Voltage Range	85-264 V <sub>AC</sub> (DC input range 120-375 V <sub>DC</sub> ) <sup>1)</sup>	
Input Frequency	47-63 Hz	
Input Current	115 V <sub>AC</sub> < 1.50 A 230 V <sub>AC</sub> < 0.80 A	< 1.00 A < 0.53 A
Efficiency <sup>2)</sup> at 100% Load	115 V <sub>AC</sub> > 89.0% 230 V <sub>AC</sub>	> 88.0% > 89.0%
Max Inrush Current (Cold Start)	115 V <sub>AC</sub> < 40 A 230 V <sub>AC</sub> < 80 A	< 30 A < 60 A
Power Factor	115 V <sub>AC</sub> 230 V <sub>AC</sub>	Conform to EN 61000-3-2
Leakage Current	240 V <sub>AC</sub>	< 0.5 mA
Mechanical		
Case Cover / Chassis	Plastic	Aluminium
Dimensions (H × W × D)	mm 120.6 × 32 × 119.3 inch 4.75 × 1.26 × 4.70	124 × 40 × 124 4.88 × 1.57 × 4.88
Unit Weight	kg 0.33 lb 0.73	0.60 1.32
Cooling System	Convection	
MTBF <sup>3)</sup>	> 800,000 hrs	
Environment		
Operating Temperature <sup>4)</sup>	-25°C to +80°C	
Storage Temperature	-40°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)	

## Dimensions Reference



### Notes

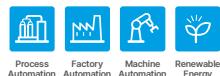
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# cliQ<sup>®</sup> (24 V)



- Designed for single phase input 180-305 V<sub>AC</sub> (L-N) or 2 of 3-Phase system 2 x 180-550 V<sub>AC</sub> (L-L) or 254-780 V<sub>DC</sub>
- Compact and corrosion resistant aluminium casing
- High Efficiency > 90.0%
- Wide operating temperature range from -30°C to +70°C
- Built-in DC OK contact
- Conformal coating on PCBAs to protect against common dust and pollutants

## Applications



Process Automation    Factory Automation    Machine Automation    Renewable Energy

Output	DRP-24V120W2BN	DRP-24V240W2BN
Output Voltage	24 V	24 V
Output Voltage Range	24-28 V	24-28 V
Output Current	0-5.0 A	0-10.0 A
Output Power	120 W	240 W
PARD (20MHz)	< 150 mVpp	< 150 mVpp @ -10°C and above < 200 mVpp @ below -10°C
Hold-up Time	2 x 230 V <sub>AC</sub> > 10 ms 2 x 400 V <sub>AC</sub> > 50 ms	> 18 ms > 30 ms
Input	Single Phase or Two Phase	
Phase Input		
Input Voltage Range	2 x 180-550 V <sub>AC</sub> or 180-305 V <sub>DC</sub> (Single Phase) (DC input range 254-780 V <sub>DC</sub> ) <sup>1)</sup>	
Input Frequency	47-63 Hz	
Input Current	2 x 230 V <sub>AC</sub> < 1.20 A 2 x 400 V <sub>AC</sub> < 0.80 A	< 2.00 A < 1.00 A
Efficiency <sup>2)</sup> at 100% Load	> 90.0%	
Max Inrush Current (Cold Start)	2 x 200 V <sub>AC</sub> 2 x 500 V <sub>AC</sub>	< 50 A
Power Factor	2 x 230 V <sub>AC</sub> 2 x 400 V <sub>AC</sub>	Conform to EN 61000-3-2
Leakage Current	500 V <sub>AC</sub> < 1 mA	< 3.5 mA
Mechanical	Aluminium	
Case Cover / Chassis	Aluminium	
Dimensions (H x W x D)	mm 124 x 40 x 117 inch 4.88 x 1.57 x 4.61	124 x 60 x 117 4.88 x 2.36 x 4.61
Unit Weight	kg 0.62 lb 1.37	0.81 1.79
Cooling System	Convection	
MTBF <sup>3)</sup>	> 800,000 hrs	
<b>Environment</b>		
Operating Temperature <sup>4)</sup>	-30°C to +70°C	
Storage Temperature	-40°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft); ITE Application: 0 to 2,500 m (0 to 8,200 ft)	

## Dimensions Reference



Notes

- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 2 x 200 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# cliQ<sup>®</sup> (24 V)



- Power will not de-rate for the entire input voltage range
- Power Boost of 150% up to 5 s (480 W: 200% for 2 s)
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (except DRP024V960W3BN)

## Applications



Process Automation    Factory Automation    Machine Automation    Renewable Energy

Output	DRP024V060W3B□	DRP024V120W3B□	DRP024V240W3B□	DRP024V480W3B□	DRP024V960W3BN		
Output Voltage	24 V	24 V	24 V	24 V	24 V		
Output Voltage Range	24-28 V	24-28 V	24-28 V	24-28 V	24-28 V		
Output Current	0-2.5 A	0-5.0 A	0-10.0 A	0-20.0 A	0-40.0 A		
Output Power	60 W	120 W	240 W	480 W	960 W		
PARD (20MHz)	< 150 mVpp		< 240 mVpp				
Hold-up Time	3 x 400 V <sub>AC</sub> 3 x 500 V <sub>AC</sub>	> 20 ms > 40 ms	> 20 ms				
Input	Two Phase or Three Phase						
Phase Input			Two Phase or Three Phase				
Input Voltage Range (Does not exceed 600 V <sub>AC</sub> )	3 x 320-600 V <sub>AC</sub> or 2 x 360-600 V <sub>AC</sub> (DC input range 450-800 V <sub>DC</sub> ) <sup>1)</sup>		3 x 320-600 V <sub>AC</sub> or 2 x 380-600 V <sub>AC</sub> (DC input range 450-800 V <sub>DC</sub> ) <sup>1)</sup>				
Input Frequency	47-63 Hz		47-63 Hz				
Input Current	3 x 400 V <sub>AC</sub> < 0.30 A 3 x 500 V <sub>AC</sub> < 0.25 A	< 0.50 A < 0.40 A	< 0.75 A < 0.65 A	< 1.00 A < 0.75 A	< 1.70 A < 1.40 A		
Efficiency <sup>2)</sup> at 100% Load	3 x 400 V <sub>AC</sub> 3 x 500 V <sub>AC</sub>	> 86.0%	> 88.0%	> 91.0%			
Max Inrush Current (Cold Start) <sup>3)</sup>	3 x 400 V <sub>AC</sub> 3 x 500 V <sub>AC</sub>	< 30 A		< 40 A < 50 A	< 60 A		
Power Factor	3 x 400 V <sub>AC</sub> 3 x 500 V <sub>AC</sub>	Conform to EN 61000-3-2		> 0.95 > 0.94	> 0.95 > 0.94		
Leakage Current	3 x 500 V <sub>AC</sub>	< 3.5 mA		< 3.5 mA			
Mechanical	Aluminium						
Case Cover / Chassis	Aluminium		Aluminium				
Dimensions (H x W x D)	mm 121 x 50 x 117.3 inch 4.76 x 1.97 x 4.62	121 x 50 x 117.3 4.76 x 1.97 x 4.62	121 x 70 x 117.3 4.76 x 2.76 x 4.62	121 x 140 x 117.3 4.76 x 5.51 x 4.62	121 x 255 x 117.3 4.76 x 10.0 x 4.62		
Unit Weight	kg 0.66 lb 1.46	0.66 1.46	0.89 1.96	1.35 2.98	2.60 5.73		
Cooling System	Convection		Convection				
MTBF <sup>4)</sup>	> 800,000 hrs		> 500,000 hrs		> 300,000 hrs		
Environment							
Operating Temperature <sup>5)</sup>	-25°C to +80°C		-25°C to +65°C				
Storage Temperature	-40°C to +85°C						
Operating Humidity	5 to 95% RH (Non-Condensing)						
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft); ITE Application: 0 to 2,500 m (0 to 8,200 ft)						

## Dimensions Reference



Notes

- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V480W3B□ and DRP024V960W3B□ are also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 3 x 400 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
- 4) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 2 x 200 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
- 5) Refer power de-rating in the product datasheet.
- 6) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# cliQ™ (48 V)



- Power will not de-rate for the entire input voltage range
- High Efficiency > 91.0% @ 230 V<sub>AC</sub>
- Power Boost of 150% up to 5 s
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBA to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

## Applications



Process Automation    Factory Automation    Machine Automation    Renewable Energy

Output	DRP048V060W1B□	DRP048V120W1B□	DRP048V240W1B□	DRP048V480W1B□					
Output Voltage	48 V	48 V	48 V	48 V					
Output Voltage Range	48-56 V	48-56 V	48-56 V	48-56 V					
Output Current	0-1.25 A	0-2.5 A	0-5.0 A	0-10.0 A					
Output Power	60 W	120 W	240 W	480 W					
PARD (20MHz)	< 200 mVpp								
Hold-up Time	115 V <sub>AC</sub> 230 V <sub>AC</sub> > 125 ms	> 20 ms > 50 ms	> 20 ms						
<b>Input</b>									
Phase Input	Single Phase								
Input Voltage Range	85-264 V <sub>AC</sub> (DC input range 120-375 V <sub>DC</sub> ) <sup>1)</sup>								
Input Frequency	47-63 Hz								
Input Current	115 V <sub>AC</sub> < 1.4 A 230 V <sub>AC</sub> < 0.8 A	< 2.2 A < 1.1 A	< 2.5 A < 1.3 A	< 5.0 A < 3.0 A					
Efficiency <sup>2)</sup> at 100% Load	115 V <sub>AC</sub> > 91.0% 230 V <sub>AC</sub> > 92.0%	> 90.0% > 92.0%		> 91.0% > 93.0%					
Max Inrush Current (Cold Start)	115 V <sub>AC</sub> < 20 A 230 V <sub>AC</sub> < 35 A	< 35 A							
Power Factor	115 V <sub>AC</sub> Conform to EN 61000-3-2 230 V <sub>AC</sub>	> 0.99 > 0.93	> 0.96 > 0.90						
Leakage Current	240 V <sub>AC</sub>	< 1 mA							
<b>Mechanical</b>									
Case Cover / Chassis	Aluminium								
Dimensions (H × W × D)	mm 121 × 32 × 125 inch 4.76 × 1.26 × 4.92	121 × 50 × 123.1 4.76 × 1.97 × 4.85	121 × 85 × 124.1 4.76 × 3.35 × 4.86	121 × 144 × 118.6 4.76 × 5.67 × 4.67					
Unit Weight	kg 0.38 lb 0.84	0.72 1.59	0.96 2.12	1.37 3.02					
Cooling System	Convection								
MTBF <sup>3)</sup>	> 800,000 hrs								
<b>Environment</b>									
Operating Temperature <sup>4)</sup>	-25°C to +80°C								
Storage Temperature	-40°C to +85°C								
Operating Humidity	5 to 95% RH (Non-Condensing)								
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)								

## Dimensions Reference



- Notes
- All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
  - At 25°C ambient temperature by vertical mounting orientation.
  - MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
  - Refer power de-rating in the product datasheet.
  - All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# cliQ™ (24 V)



- Built-in constant current circuit for charging applications
- High efficiency of up to 94% at 230 V<sub>AC</sub>
- Power Boost of 150% up to 5 s
- SEMI F47 compliance at 120 V<sub>AC</sub>
- Extreme low temperature cold start at -40°C
- Built-in DC OK Contact and LED indicator for DC OK
- Conformal coating on PCBA to protect against common dust and pollutants

## Applications



Output	DRP-24V120W1C□N	DRP-24V240W1C□N	DRP-24V480W1C□N
Output Voltage	24 V	24 V	24 V
Output Voltage Range	24-28 V	24-28 V	24-28 V
Output Current	0-5.0 A	0-10.0 A	0-20.0 A
Output Power	120 W	240 W	480 W
PARD (20MHz)	< 100 mVpp		
Hold-up Time	115 V <sub>AC</sub> 230 V <sub>AC</sub>	> 20 ms	> 15 ms
<b>Input</b>			
Phase Input	Single Phase		
Input Voltage Range	DRP-24V□W1C□N: 88-264 V <sub>AC</sub> DRP-24V□W1CBN: 88-264 V <sub>AC</sub> (DC input range 88-375 V <sub>DC</sub> ) <sup>1)</sup>		
Input Frequency	47-63 Hz		
Input Current	115 V <sub>AC</sub> < 1.4 A 230 V <sub>AC</sub> < 0.7 A	< 2.6 A < 1.3 A	< 5.0 A < 2.5 A
Efficiency <sup>2)</sup> at 100% Load	115 V <sub>AC</sub> > 89.5% 230 V <sub>AC</sub> > 91.0%	> 91.0% > 92.0%	
Max Inrush Current (Cold Start)	115 V <sub>AC</sub> < 35 A 230 V <sub>AC</sub> < 70 A	< 33 A < 65 A	< 40 A < 80 A
Power Factor	115 V <sub>AC</sub> > 0.96 230 V <sub>AC</sub> > 0.93	> 0.93 > 0.90	
Leakage Current (264 V <sub>AC</sub> , 50 Hz)	T/T/TN < 0.47 mA IT < 1.20 mA	< 0.74 mA < 2.00 mA	< 1.12 mA < 2.55 mA
<b>Mechanical</b>			
Case Cover / Chassis	Aluminium		
Dimensions (H × W × D)	mm 124 × 40 × 117 inch 4.88 × 1.57 × 4.61	124 × 60 × 117 4.88 × 2.36 × 4.61	124 × 82 × 127 4.88 × 3.23 × 5.00
Unit Weight	kg 0.58 lb 1.28	0.84 1.85	1.20 2.65
Cooling System	Convection		
MTBF <sup>3)</sup>	> 1,411,300 hrs		
<b>Environment</b>			
Operating Temperature <sup>4)</sup>	-25°C to +70°C		
Storage Temperature	-40°C to +85°C		
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)		

## Dimensions Reference



- Notes
- All models are certified for DC input.
  - At 25°C ambient temperature by vertical mounting orientation.
  - MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V<sub>AC</sub>, O/P: 100% load) for vertical mounting orientation.
  - Refer power de-rating in the product datasheet.
  - All parameters are specified at 25°C ambient temperature unless otherwise indicated.