

FORCE-GT (24 V)



- Built-in constant current circuit for charging applications
- Full load operating temperature up to 55°C
- Cold start at -40°C
- Ultra-Slim design
- Reduced no-load power consumption
- Built-in DC OK relay and LED indicator
- Conformal coating on PCBAs to protect against common dust and pollutants

Applications



Process Automation Factory Automation Machine Automation Renewable Energy

Output	NEW DRF-24V120W3GBA	NEW DRF-24V240W3GBA	NEW DRF-24V480W3GBA	NEW DRF-24V960W3GBA			
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	0-5.0 A	0-10.0 A	0-20.0 A	0-40.0 A			
Output Power	120 W	240 W	480 W	960 W			
PARD (20 MHz)	< 100 mVpp	< 150 mVpp	< 200 mVpp				
Hold-up Time	3 x 400 V _{AC} 3 x 500 V _{AC}	20 ms typ. 40 ms typ.		20 ms typ.			
Input	Two or Three Phase						
Phase Input							
Input Voltage Range	3 x 320-575 V _{AC} (3-Phase) or 2 x 340-575 V _{AC} (2-Phase) ¹⁾						
Input Frequency	47-63Hz						
Input Current	3 x 400 V _{AC} 3 x 500 V _{AC}	< 0.50 A < 0.40 A	< 0.75 A < 0.65 A	< 0.85 A < 0.73 A			
Efficiency ²⁾ at 100% Load	3 x 400 V _{AC} 3 x 500 V _{AC}	87.5% typ.	89.5% typ.	94.0% typ. 94.5% typ.			
Max Inrush Current (Cold Start)	3 x 400 V _{AC} 3 x 500 V _{AC}	20 A typ. 25 A typ.		35 A typ.			
Power Factor	3 x 400 V _{AC} 3 x 500 V _{AC}	> 0.45 > 0.40	> 0.50	> 0.90 > 0.88			
Leakage Current	3 x 500 V _{AC}	< 3.5 mA					
Mechanical	Aluminium						
Case Cover / Chassis							
Dimensions (H x W x D)	mm 124 x 38 x 125.3 inch 4.88 x 1.50 x 4.93	124 x 50 x 125.3 4.88 x 1.97 x 4.93	124 x 65 x 127.3 4.88 x 2.56 x 5.01	124 x 110 x 128.7 4.88 x 4.33 x 5.07			
Unit Weight	kg 0.54 lb 1.19	0.84 1.85	1.20 2.65	2.26 4.98			
Cooling System	Convection						
MTBF ³⁾	> 700,000 hrs						
Environment							
Operating Temperature ⁴⁾	3-Phase: -25°C to +70°C / 2-Phase: -25°C to +60°C						
Storage Temperature	-40°C to +85°C						
Operating Humidity	5 to 95% RH (Non-Condensing)						
Operating Altitude ⁵⁾	0 to 5,000 m (0 to 16,400 ft)						

Dimensions Reference



Notes

- 1) Power supply can operate at 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_{AC} & 3 x 500 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) According to IEC/EN 62368-1, IEC/EN 61010.
- 6) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

LYTE (12 V, 24 V, 48 V)



- Built-in constant current circuit for reactive loads
- Full power from -10°C to +50°C @ 230 V_{AC} with -30°C cold start
- Compliance to SEMI F47 @ 200 V_{AC}
- NEC Class 2 / Limited Power Source (LPS) certified (DRL-24V75W1AZ□ & DRL-48V75W1AZ□)

Applications



Building Automation Process Automation Factory Automation Machine Automation

Output	DRL-12V75W1AZ□	DRL-24V75W1AZ□	DRL-48V75W1AZ□		
Output Voltage	12 V	24 V	48 V		
Output Voltage Range	10.8-13.2 V	21.6-26 V	43.2-52.8 V		
Output Current	6.25 A	3.125 A	1.57 A		
Output Power	75 W	75 W	75.36 W		
PARD (20 MHz)	< 120 mVpp @ > -10°C to +70°C < 360 mVpp @ ≤ -10°C to -30°C				
Hold-up Time	115 V _{AC} 230 V _{AC}	16 ms typ. 60 ms typ.			
Input	Single Phase				
Phase Input					
Input Voltage Range	85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾				
Input Frequency	47-63Hz				
Input Current	115 V _{AC} 230 V _{AC}	1.4 A typ. 0.9 A typ.	1.4 A typ. 0.9 A typ.		
Efficiency ²⁾ at 100% Load	230 V _{AC}	87.5% typ.	89.0% typ. 90.0% typ.		
Max Inrush Current (Cold Start)	230 V _{AC}	50 A typ.			
Power Factor	115 V _{AC} 230 V _{AC}	NA			
Leakage Current	240 V _{AC}	< 1mA			
Mechanical	Plastic				
Case Cover / Chassis					
Dimensions (H x W x D)	mm 123.6 x 27 x 102 inch 4.87 x 1.06 x 4.02	123.6 x 27 x 102 4.87 x 1.06 x 4.02	123.6 x 27 x 102 4.87 x 1.06 x 4.02		
Unit Weight	kg 0.22 lb 0.49	0.22 0.49	0.22 0.49		
Cooling System	Convection				
MTBF ³⁾	> 700,000 hrs				
Environment					
Operating Temperature ⁴⁾	-20°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

- 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: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.

LYTE II (12 V, 24 V, 48 V)



- Slim type design
- Built-in constant current circuit for reactive loads
- Operating from -30°C to +70°C with -40°C cold start
- Compliance with DOE VI energy standard (except 480 W)
- Reduced no-load power consumption
- Compliance to SEMI F47 @ 200 V_{AC}

Applications



Building Automation Process Automation Factory Automation Machine Automation

Output	DRL-12V120W1END	DRL-12V240W1END	DRL-24V120W1END	DRL-24V240W1END	DRL-24V480W1END	DRL-48V120W1END	DRL-48V240W1END	DRL-48V480W1END
Output Voltage	12 V	12 V	24 V	24 V	24 V	48 V	48 V	48 V
Output Voltage Range	10.8-13.2 V	10.8-13.2 V	21.6-26.4 V	21.6-26.4 V	24-28 V	43.2-52.8 V	43.2-52.8 V	48-55 V
Output Current	10.0 A	20.0 A	5.0 A	10.0 A	0-20.0 A	2.5 A	5.0 A	0-10.0 A
Output Power	120 W	240 W	120 W	240 W	480 W	120 W	240 W	480 W
PARD (20 MHz)	< 120 mVpp @ 0°C to +70°C < 360 mVpp @ -30°C to 0°C		< 150 mVpp @ 0°C to +70°C < 450 mVpp @ -30°C to 0°C		< 150 mVpp @ 0°C to +70°C < 450 mVpp @ -30°C to 0°C		< 200 mVpp @ 0°C to +70°C < 600 mVpp @ -30°C to 0°C	
Hold-up Time	115 V _{AC} 230 V _{AC}	10 ms typ. 16 ms typ.	20 ms typ.	10 ms typ. 16 ms typ.	20 ms typ.	25 ms typ.	10 ms typ. 16 ms typ.	20 ms typ.
Input								
Phase Input	Single Phase							
Input Voltage Range	90-264 V _{AC}							
Input Frequency	47-63 Hz							
Input Current	115 V _{AC} 230 V _{AC}	2.1 A typ. 1.3 A typ.	2.5 A typ. 1.3 A typ.	2.1 A typ. 1.3 A typ.	2.5 A typ. 1.3 A typ.	4.7 A typ. 2.4 A typ.	2.1 A typ. 1.3 A typ.	2.5 A typ. 2.4 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	86.0% typ.	86.5% typ.	88.5% typ.	86.5% typ.	93.0% typ.	89.5% typ.	90.5% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	35 A typ.	40 A typ.	35 A typ.	40 A typ.	40 A typ.	35 A typ.	40 A typ.
Power Factor	115 V _{AC} 230 V _{AC}	NA	> 0.95	NA	> 0.95	> 0.96 > 0.93	NA	> 0.95 > 0.93
Leakage Current	240 V _{AC}	< 0.5 mA	< 0.75 mA	< 0.5 mA	< 0.75 mA	< 1.5 mA	< 0.5 mA	< 0.75 mA < 1.5 mA
Mechanical								
Case Cover / Chassis	SGCC / Aluminium							
Dimensions (H x W x D)	mm Inch	123.6 x 30 x 116.8 4.87 x 1.18 x 4.60	123.6 x 40 x 116.8 4.87 x 1.57 x 4.60	123.6 x 30 x 116.8 4.87 x 1.18 x 4.60	123.6 x 40 x 116.8 4.87 x 1.57 x 4.60	123.6 x 56 x 116.8 4.87 x 2.20 x 4.60	123.6 x 30 x 116.8 4.87 x 1.18 x 4.60	123.6 x 40 x 116.8 4.87 x 2.20 x 4.60
Unit Weight	kg lb	0.45 0.99	0.62 1.37	0.45 0.99	0.62 1.37	0.87 1.91	0.45 0.99	0.62 1.37
Cooling System	Convection							
MTBF ²⁾	> 700,000 hrs							
Environment								
Operating Temperature ³⁾	-30°C to +70°C							
Storage Temperature	-40°C to +85°C							
Operating Humidity	20 to 90% RH (Non-Condensing)							
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)							
20 to 90% RH (Non-Condensing) 0 to 5,000 m (0 to 16,400 ft)								

Dimensions Reference



Notes
1) At 25°C ambient temperature by vertical mounting orientation.
2) MTBF as per Telcordia SR-332 (IIP: 115 V_{AC} & 230 V_{AC}, O/P: 100% load) for vertical mounting orientation.

3) Refer power de-rating in the product datasheet.
4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.