

Increased AC Drive Performance, Superior Braking Capability and Energy Savings



1336 REGEN Line Regeneration Package

Power Range

The 1336 REGEN Line Regeneration Package is available in frame sizes capable of regenerating or supplying (in Regenerative DC Bus Supply mode) between 37 and 143 kW (48 – 180A AC) at 380 – 480V AC.

Product Highlights

- Software-selectable operating modes offer flexibility to cover nearly all regenerative applications:
 - **Regenerative Brake** mode for stand-alone AC drives
 - **Regenerative DC Bus Supply** mode for single or multiple common bus AC drives
- SCANport™ protocol provides common interface for programming devices, communications, and DriveTools™ software.
- Common power platform of 1336 PLUS, 1336 PLUS II, 1336 IMPACT™ and 1336 FORCE™ family of drives.

Regenerative Brake Mode

- Energy-efficient alternative to dynamic brakes and chopper modules in stand-alone 1336 PLUS, 1336 PLUS II, 1336 IMPACT and 1336 FORCE drive applications.
- Sized independently of the drive for amount of braking needed.
- AC line current harmonic spectrum comparable to that of a standard AC drive input with 3% line reactor.
- Available as a standard product or factory packaged to your specification.

Regenerative DC Bus Supply Mode

- Supplies a regulated DC bus to any combination of 1336 PLUS, 1336 PLUS II, 1336 IMPACT or 1336 FORCE common bus drives.
- Provides excellent immunity to AC line voltage disturbances.
- Low input current harmonics are below IEEE 519-1992 limits with custom line reactor and harmonic filter.
- Patented two-phase PWM and fully digital current loop provide high bandwidth and low system losses.
- Available as a factory packaged product built to your specification.



The 1336 REGEN Line Regeneration Package allows energy-efficient braking in stand-alone AC drive applications, and provides improved drive performance and low AC line input current harmonics in common bus applications. The 1336 REGEN converter is built on the same power platform and uses the same operator and communication interface as the 1336 PLUS, 1336 PLUS II, 1336 IMPACT and 1336 FORCE AC drives.



Application Logic	<ul style="list-style-type: none"> • Regen DC Bus Supply operation at fixed user-settable voltage or as a percentage of the AC line voltage 	<ul style="list-style-type: none"> • Selectable Regen Brake/Regen DC Bus Supply modes • Parameter-selectable operation at either 380V (400V) or 460V AC 		
Operator Interface	<ul style="list-style-type: none"> • SCANport communications interface • 2-Line x 16-Character LCD Human Interface Module (HIM) 	<ul style="list-style-type: none"> • 24V/120V jumper selectable Enable, External Fault, and Fault Reset inputs • Form C Enabled/Not Enabled and Fault contact outputs 		
Standards	<ul style="list-style-type: none"> • UL Listed • cUL Listed 	<ul style="list-style-type: none"> • Designed to meet IEEE 519-1992 current and voltage distortion limits (Regen DC Bus Supply mode only) 		
Converter Protection	<ul style="list-style-type: none"> • Bus under and over voltage • Separate AC line under and over voltage trip levels for Enabled and Not Enabled states • AC input over current 	<ul style="list-style-type: none"> • Heatsink over temperature • Input phase-to-phase short circuit • Input phase-to-ground short circuit (Regen DC Bus Supply mode only) 		
Nominal Ratings	48 - 180 Amps			
Input Specifications	Frequency Control Ride Through Three-Phase Voltage AC Line Current Limit	50/60 Hz (\pm 3Hz) 2 Sec Typical 380-460V AC +15% / -10% 150% / -150% of rated for 1 minute		
Output Specifications	DC Bus Voltage Reference (Regen DC Bus Supply mode)	735V nominal @ 460V AC 607V nominal @ 380V AC		
Parameter Adjustments	Operational Mode Bus Voltage Reference (Regen DC Bus Supply mode only)	Regen Brake/Regen DC Bus Supply modes Regen DC Bus Supply mode: Fixed DC Bus Voltage or DC Bus Voltage Trim Selectable 380V (400V)/460V Operation +2% / +18% of rated AC line peak		
Ambient Operating Temperatures	Without Enclosure (IP00; Open Style) With Enclosure (IP20; NEMA Type 1)	0 to 50 degrees C 0 to 40 degrees C		
Dimensions - mm (inches)	Rating	Height	Width	Depth
	Converter (380V-480V), IP 20 (NEMA Type 1)			
	48A	476 (18.75)	276 (10.88)	225 (8.86)
	78A	701.0 (27.60)	301.8 (11.88)	225 (8.86)
	180A	1240 (48.82)	382 (15.02)	271 (10.66)
	Precharge (380V-480V), IP20 (NEMA Type 1)			
	48A/78A	356 (14.00)	203 (8.00)	203 (8.00)
	180A	533 (21.00)	254 (10.00)	229 (9.00)
	Line Reactor, 3% (for Regen Brake operation ,380V-480V), IP00 (Open)			
	48A	178 (7.00)	229 (9.00)	122 (4.80)
	78A	208 (8.20)	274 (10.80)	147 (5.80)
	180A	213 (8.40)	274 (10.80)	216 (8.50)
	Line Reactor, 10% (for Regen DC Bus Supply Operation, 380V-480V), IP00 (Open)			
	48A	216 (8.50)	279 (11.00)	207 (8.16)
	78A	216 (8.50)	279 (11.00)	233 (9.16)
	180A	318 (12.50)	368 (14.50)	292 (11.51)

SCANport, DriveTools, 1336 IMPACT and 1336 FORCE are trademarks of Allen-Bradley Co., Inc.



Rockwell Automation helps its customers receive a superior return on their investment by bringing together leading brands in industrial automation, creating a broad spectrum of easy-to-integrate products. These are supported by local technical resources available worldwide, a global network of system solutions providers, and the advanced technology resources of Rockwell.