

AXPERT **Eazy+** 4Q Series VFD

World's Most Advanced 4Q Regenerative VFD

The Next Generation **Axpert-Eazy+ 4Q Series Regenerative VFD** is the outcome of Amtech's three decades of experience in motor control and automation. The Low harmonics, High efficiency Industrial Grade New Series is designed to meet the ever increasing expectations of our customers; deliver highest performance, protection and energy saving without compromising the user friendliness.

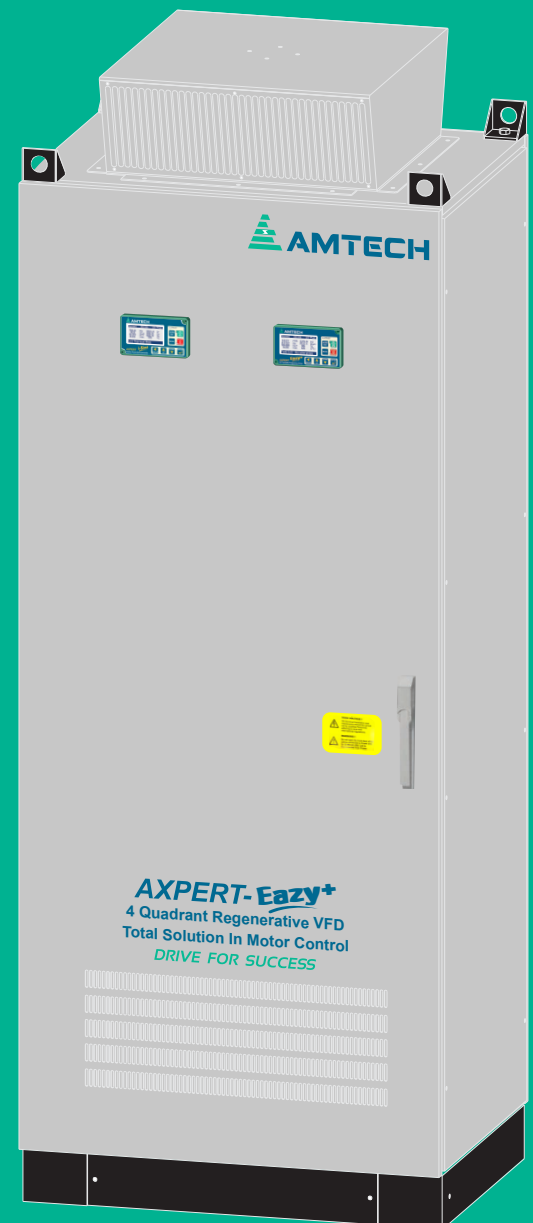
The 4Q Regenerative VFD has IGBT based converter which keeps the supply side line current harmonics below 5% and power factor to unity at rated load. It is also capable of feeding the excessive power generated by load back to the grid. It comes with fully configurable I/O and Functional Safety Functions and meets the international power quality standards such as IEEE 519-2014.

Benefits

- Energy savings as it feeds back the excess power to grid from regenerative loads, connected at the output.
- Reduces total harmonic distortion to draw sine wave current from the utility.
- Minimized downtime due to reliable operation as it stabilizes DC voltage against mains and load fluctuations and provides stable AC voltage output.
- Optimized cost and space as it includes an active supply unit and a line filter in drive.
- Improves power factor to unity.

Target Applications

- Centrifuges
- Cranes and hoists
- Un-winders
- Paper machines
- Regenerative application
- Roller tables
- Test jigs for dynamometers, gears and motor test benches



“Feeds back excess power with improved quality”

Standard Specifications

Input Voltage	380...480 VAC, 3-Phase, 3-Wire, 50/60 Hz, Nominal voltage 415 V													
Tolerance	Voltage: -15...+10 %, Freq. tolerance: ±5 %													
Output Voltage	0...Input voltage													
Output Frequency	0.10...599.00 Hz for V/F control													
Model AMT-4Q-XXXXA-4	0155A	0190A	0225A	0260A	0336A	0375A	0415A	0445A	0510A	0590A	0660A	0785A	0850A	0925A
Input capacity (kVA)	83	99	121	144	175	218	218	272	272	343	387	438	492	545
Input current (Amp)	115	140	170	200	245	304	304	380	380	475	540	610	685	760
Inverter capacity (kW)	075	090	110	132	160	185	200	220	250	315	355	400	450	500
Output No overload rating (Amp)	155	190	225	260	336	375	415	445	510	590	660	785	850	925
Output No overload rating (kW)	075	090	110	132	160	185	200	220	250	315	355	400	450	500
Output Normal duty rating (Amp)	147	180	215	246	320	360	395	425	485	575	630	745	810	880
Output Normal duty rating (kW)	075	090	110	132	160	185	200	220	250	315	355	400	450	500
Output Heavy duty rating (Amp)	115	155	190	225	260	336	375	410	425	490	550	660	745	810
Output Heavy duty rating (kW)	055	075	090	110	132	160	185	200	220	250	315	355	400	450
Output Overload Current Rating	Nominal output current available continuously, No overload allowed 120 % for 60 second, 140 % for 2.5 second every 5 minimum, Normal Duty (ND) use 150 % for 60 second, 175 % for 2.5 second every 5 minimum, Heavy Duty (HD) use													
Control Specifications														
Control mode	Constant Voltage													
Control method	Hysteresis current control													
Input current distortion (% THD)	Less than 5 % (at 100 % load)													
Input Power factor (Default)	0.99 (at 100 % load & nominal voltage) More than 0.95 (at load of more than 30 %)													
Regeneration mode	Yes (Automatic)													
Max. Switching Frequency	5 kHz													
Mechanical Specifications														
Color	RAL 7035													
Protection class	IP 31													
Installation	Floor mounting													
Dimensions (W x D x H) mm	A	A	A	A	A	B	B	B	B	C	C	D	D	D
	A = 800 x 600 x 1800				B = 800 x 800 x 800			C = 1100 X 800 x 2000				D = 2500 x 800 x 2000		
Installation location	Indoor													
Ambient temperature	-15...45 °C (5...113 °F)													
Storage temperature	-20...70 °C (-4 ...158 °F)													
Audible noise	≤ 78 db @ 1.0 m (3ft)													
Altitude (above sea level)	1000 m (3300 ft) without derating, above this derate 3 % per 305 m (1000 ft) upto 4000 m (13200 ft)													
Derating with temperature	Above 45 °C (113 °F), derate by 3 % /1 °C (1.8 °F) maximum up to 50 °C (122 °F) temperature													
Relative humidity	0...95 % max. non condensing													

Note:

1. Module efficiency >96%
2. All specifications valid at nominal voltage
3. All control functions, operating specifications, display indications, communication & protective specifications are as per standard Aexpert-Eazy+ Series VFD.
4. For higher rating model, contact Amtech sales representative.



DRIVE FOR SUCCESS

E-6, GIDC Electronics Zone, Gandhinagar - 382028, Gujarat, India.
 Phone: +91-79-23289101, 23289102, 23289103 | Fax: +91-79-23289111
 Email: info@amtechelectronics.com | Website: www.amtechelectronics.com
 Specifications in this catalog are subject to change without notice

CAT.NO.: AEIL/4Q/10-2021