

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

ABB / BALDOR / RELIANCE

ABB / Baldor / Reliance ZD18H403-E AC Vector Controller

ABB / Baldor / Reliance Industrial Controllers & PLCs. Frequency Range: 50/60 Hz input; 500 Hz maximum output, Voltage / Current Range: 3-phase; 5.2 A / 5 A output (constant torque); 10 A / 8.2 A output (variable torque), 460 VAC input.



MODEL

**ABB / Baldor /
Reliance
ZD18H403-E**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

ZD18H403-E

LISTING

<https://aumictechlabs.com/products/zd18h403-e-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The ZD18H403-E is a Series 18H AC Flux Vector Controller engineered for precise motor speed and torque control in industrial drive applications. This 460 VAC, three-phase unit delivers 3 HP / 2.2 kW at constant torque or 5 HP / 3.7 kW at variable torque, with maximum output frequency to 500 Hz. The controller employs advanced vector control algorithms and integrates dynamic braking for rapid load deceleration without regenerative or DC injection capability. Technical Specifications Input: 460 VAC, 50/60 Hz, three-phase Output Current: 5.2 A / 5 A (constant torque); 10 A / 8.2 A (variable torque) Maximum Output Frequency: 500 Hz Horsepower: 3 HP / 2.2 kW (constant torque); 5 HP / 3.7 kW (variable torque) Dimensions: 12" H × 7.7" W × 7.1" D; Weight: 18 LB (net) / 23 LB (shipped) Enclosure: NEMA 1 standard; NEMA 4X available for

wasdown duty Operating Temperature: 0°C to 40°C Cooling: Forced airKey Features Dynamic braking for load holding and deceleration control Adjustable current limit with line-to-line and line-to-ground fault protection Motor overspeed, overload, and over-temperature protection with linear heat sink thermal monitoring Isolated control circuitry and selectable automatic restart at momentary power loss Keypad operator interface with digital display for fault diagnosis UL and CUL agency approvalsInterfaces and Options The controller supports optional communication and feedback modules including RS232, RS422/RS485, analog relay output, DC tachometer interface, high-resolution analog input, isolated encoder input, resolver input, and master/pulse/follower configurations.Typical Applications Suitable for variable torque, constant torque, and constant horsepower loads in new installations, retrofit replacements, and OEM integration. Designed for AC vector duty motors in demanding industrial environments. Note: This model is discontinued by the manufacturer.

ZD18H403E Characteristics / Specifications

PARAMETER	VALUE
Model	ZD18H403-E
Instrument Type	AC flux vector motor controller
Family	Baldor / Reliance Series 18H
Input Voltage	460 VAC
Output Voltage	460 VAC
Phases	three phase
Hp Class	3 HP (2/3/5 HP 18H catalog family)
Enclosure	NEMA 1 with built-in dynamic braking
Braking	dynamic braking transistor (not regenerative)
Cooling	forced air
Operator	keypad
Control	AC flux vector speed and torque
Motor Type	AC induction
Max Frequency	500 Hz (Series 18H line)
Ct Current Class	5.2 A constant torque (3 HP 460 V 18H row)
Vt Current Class	10 A variable torque (3 HP 460 V 18H row)
Ship Weight Catalog	18.000 lb (Baldor catalog)
Upc	781568176498
Status	discontinued on Baldor catalog
Sibling	ZD18H403-W 3 HP 460 V 18H
Manufacturer	Baldor Electric / Reliance / ABB
Literature	Baldor ZD18H403-E catalog row, Series 18H vector identification, Artisan 460 VAC configuration
Application	general-purpose industrial inverter / vector drive
Mounting	NEMA 1 wall/panel enclosure

ZD18H403E Specifications

PARAMETER	VALUE
Applications	3 HP 460 V vector speed/torque control of AC induction motors with dynamic braking in a NEMA 1 enclosure.
Key Features	Series 18H flux vector, 460 VAC in/out
Technical Specifications	Model: ZD18H403-E

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	ZD18H403-E
Instrument Type	AC flux vector motor controller
Family	Baldor / Reliance Series 18H
Input Voltage	460 VAC
Output Voltage	460 VAC
Phases	three phase
Hp Class	3 HP (2/3/5 HP 18H catalog family)
Enclosure	NEMA 1 with built-in dynamic braking
Braking	dynamic braking transistor (not regenerative)
Cooling	forced air
Operator	keypad
Control	AC flux vector speed and torque
Motor Type	AC induction
Max Frequency	500 Hz (Series 18H line)
Ct Current Class	5.2 A constant torque (3 HP 460 V 18H row)
Vt Current Class	10 A variable torque (3 HP 460 V 18H row)
Ship Weight Catalog	18.000 lb (Baldor catalog)
Upc	781568176498
Status	discontinued on Baldor catalog
Sibling	ZD18H403-W 3 HP 460 V 18H
Manufacturer	Baldor Electric / Reliance / ABB
Literature	Baldor ZD18H403-E catalog row, Series 18H vector identification, Artisan 460 VAC configuration
Application	general-purpose industrial inverter / vector drive
Mounting	NEMA 1 wall/panel enclosure
Notes	
From Baldor ZD18H403-E catalog (460 V 18H 2/3/5 HP, dynamic braking) and Series 18H 3 HP 460 V current-class	

rows. Exact overload and encoder feedback maps belong on the 18H instruction manual.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.