

# WX9 ASD Specifications

The WX9 adjustable speed drive offers the latest technology and proven reliability, making this AC drive one of the most advanced modular drives on the market. Our patented 18-pulse, copper-wound, auto-transformer design masters the needs of customer's applications by providing a reliable and efficient adjustable speed drive that eliminates significant harmonic content to the power grid. Virtual Line Pump (VLP) Technology® creates an operating domain within the drive that is directly and proportionately related to the specific system to which it is connected.

## Product Scope

18-Pulse: 460 V at 500 to 800 HP

## Highlights

- Patented 18-Pulse, Copper-Wound, Input Auto-Transformer Design
- Up to 60% Reduction in Transformer Losses
- VLP - Virtual Linear Pump Technology
- Common Bus Connection - Modular Inverter/Rectifier Assembly
- Small Footprint with Uniform 32" Depth on All Models
- Meet IEEE 519-1992 Guidelines without Added Filters
- 100% Continuous Overload Rating, 120% for 60 Seconds
- Eight Programmable Discrete Inputs with Selectable Sync or Source Logic
- Three Programmable Discrete Output Contacts: Two Form-A Contacts & One Form-C Contact
- Three Programmable Analog Inputs: One 0 to 20 mA or 0 to 10 VDC, One 0 to 10 VDC, & One  $\pm 10$  VDC
- Two Programmable Analog Outputs: One 4 to 20 mA or 0 to 10 VDC & One 4 to 20 mA Isolated Output
- Analog Isolator: Two Isolated Outputs & One Isolated Input
- Half/Full Duplex RS232/RS485 & TTL Communication Ports



## Standard Features

- NEMA 1, IP20, Gasket & Filter Enclosure
- Input Fuses
- Ground Lug
- 65,000 AIC Breaker
- Customer Terminal Block
- Built-In Real-Time Clock
- EOI: Door-Mounted, Backlit Plain-English LCD Display
- Ambient Temperature: 14° to 104°F (-10° to 40°C)
- Humidity: 95% Non-Condensing
- Altitude: Up to 1000 Meters without Derate
- Standards/Compliance: UL Listed in US & Canada



# WX9 ASD

## Part Numbering Convention



The WX9 series ASD is available with commonly used options such as manual bypass and input circuit breakers in an easy-to-install package. The inverter, rectifier and 18-pulse transformer are modularized and constructed in a separated enclosure.

The WX9 ASD includes an auto-transformer, input fuses, ground lug, customer terminal block, door-mounted electronic operator interface, power-on pilot light (white), run pilot light (red), fault pilot light (amber), hand/off/auto selector switch, emergency stop push button, real-time clock, RJ45 front door connection and analog isolator (two isolated outputs and one isolated input).

Isolated three-contactor bypass units include an ASD/Off/Bypass selector switch, ASD Test On/Off selector switch, bypass mode pilot light (red), and ASD mode pilot light (red). They are used for system control and are all located on the enclosure door.

Isolated solid state starter bypass units include a door-mounted solid state starter keypad, ASD/Off/Bypass selector switch, ASD Test On/Off selector switch, solid state starter mode pilot light (red), and ASD mode pilot light (red). They are used for system control and are all located on the enclosure door.

**Ordering Information:** Use the following part numbering convention to configure the WX9 when placing your order.

This example is for a 800 HP, 460 V “AA” style integrated 18-pulse assembly with a circuit breaker.

Example Part Number:	W7	4	##K	AA	DW
<b>Series:</b> WX9 ASD					
<b>Voltage:</b> 4 – 460					
<b>Model Number:</b>  <b>Example:</b> WX9480KAXAADW AX - Modular Drives					
		50K – 500 HP 60K – 600 HP 70K – 700 HP 80K – 800 HP			
<b>Style:</b> AA – Includes Circuit Breaker AE – Includes Circuit Breaker, Isolated Three-contactor Bypass, Overload Protection AS – Includes Circuit Breaker, Isolated Solid-state Bypass, Overload Protection					
<b>18-Pulse Transformer:</b> DW – Auto-transformer					
<b>Enclosure/Other Options:</b> Blank – NEMA 1 Enclosure					

**Notes:**

- Factory authorized startup is required on all ASDs.

**WX9 ASD****460 V Assembly Unit (NEMA 1 Enclosure)****Pricing & Dimensions**

VAC	HP	FLA	Model Number		H	W	D
					Dimensions (in.)		
460	500	628	WX9450KAXAADW		97.5	64	32
460	600	740	WX9460KAXAADW		97.5	64	32
460	700	900	WX9470KAXAADW		97.5	64	32
460	800	960	WX9480KAXAADW		97.5	64	32

**Notes:**

- Factory authorized startup is required on all WX9 ASDs.
- CF = Consult Factory.