

# **WD3 to SD326 Replacement Recommendations**

## **Preface**

With the discontinuation and unavailability of the WD3-004 and WD3-008 family of products there is a direct need for product replacement recommendations. This was the reason for this product recommendation document.

The recommended Schneider Electric product for replacing the Berger Lahr / SIG Positec WD3.00x products is the Schneider Electric SD326.

When using an SD326 product to replace a WD3 product mechanical design differences must be considered.

The SD326 product dimensions or “footprint” is quite different than that of the WD3 products.

The current mounting location of your WD3 product may not accommodate the SD326 product so the mounting location must be considered.

Please see the product dimensions section of this document for detailed information on the product dimension differences.

Functionally the SD326 product will directly replace the WD3 product.

Both products are 3 phase stepping motor drives used in conjunction with Schneider Electric (Berger Lahr) 3 phase stepping motors.

The SD326 product features the latest in design technologies and will provide years of trouble free service.

Robust and durable, the SD326 product offering is the best choice for replacing the WD3 products.

## **WD3-00x overview**

There are a number a various product types within the WD3-00x product family. Therefore, it is important that we understand the differences within the product family so that we can select the appropriate SD326 replacement product and accessories.

There are two main types of WD3-00x products.

The **WD3-004** is a 2.5 amp stepping motor drive designed to be used in conjunction with Schneider Electric (Berger Lahr) 3 phase LW series stepping motors rated for up to 2.5 amps.

The **WD3-008** is a 6.8 amp stepping motor drive designed to be used in conjunction with Schneider Electric (Berger Lahr) 3 phase LW series stepping motors rated for up to 5 amps.

Within these two main product groups there are a number of various combinations that were available.

On the follow page is a list of each type of WD3-00x including the identification numbers and information on the unique specifications for each device.

In addition, later in this document is a cross reference section that will guide you in selecting the correct SD326 product to use when replacing a WD3-00x product.

It is also important to review the section on accessory cable selection.

Due the design differences between the WD3-00x products and the SD326 products it is highly recommended that the factory manufactured accessory cables be used to simplify the replacement process.

## **WD3-00x product types with identification numbers**

### **WD3-004.0801      Id# 64304080103 or 64304080104 or 64304080105**

3 phase 2.5 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **24** volt signal level.  
No rotation monitoring function.

### **WD3-004.1801      Id# 64304180103 or 64304180104 or 64304180105**

3 phase 2.5 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **5** volt signal level.  
No rotation monitoring function.

### **WD3-004.0802      Id# 64304080203 or 64304080204**

3 phase 2.5 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **24** volt signal level.  
With rotation monitoring function.

### **WD3-004.1802      Id# 64304180203 or 64304180204**

3 phase 2.5 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **5** volt signal level.  
With rotation monitoring function.

### **WD3-008.0801      Id# 64308080103 or 64308080104**

3 phase 6.8 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **24** volt signal level.  
No rotation monitoring function.

### **WD3-008.1801      Id# 64308180103 or 64308180104**

3 phase 6.8 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **5** volt signal level.  
No rotation monitoring function.

### **WD3-008.0802      Id# 64308080103 or 64308080203**

3 phase 6.8 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **24** volt signal level.  
With rotation monitoring function.

### **WD3-008.1802      Id# 64308180203 or 64308180204**

3 phase 6.8 amp stepping motor drive for use on 115vac or 230vac.  
Inputs for pulse, direction and gate/enable are designed for **5** volt signal level.  
With rotation monitoring function.

## Replacement cross reference WD3-00x to SD326

For WD3-004.0801 and WD3-004.1801

Use **SD326DU25S2** ordering number **SD326DU25S2**

For WD3-004.0802 and WD3-004.1802

Use **SD326RU25S2** ordering number **SD326RU25S2**

For WD3-008.0801 and WD3-008.1801

Use **SD326DU68S2** ordering number **SD326DU68S2**

For WD3-008.0802 and WD3-008.1802

Use **SD326RU68S2** ordering number **SD326RU68S2**

## Recommended Pulse/Direction cable selection

Order data						
Designation	Description		for SD 3..			Order number
			26	28 A	28B	
Pulse/direction cable	5 V, shielded; device side with 24-pin Molex plug; other cable end open	0.5 m	x			VW3S8201R05
		1.5 m	x			VW3S8201R15
		3.0 m	x			VW3S8201R30
		5.0 m	x			VW3S8201R50
	24 V, shielded; device side with 24-pin Molex plug; other cable end open	0.5 m	x			VW3S8202R05
		1.5 m	x			VW3S8202R15
		3.0 m	x			VW3S8202R30
		5.0 m	x			VW3S8202R50

When replacing a WD3-004.1801, WD3-004.1802, WD3-008.1801 and WD3-008.1802 use one of the 5 volt cables from list above based on your required length.

When replacing a WD3-004.0801, WD3-004.0802, WD3-008.0801 and WD3-008.0802 use one of the 24 volt cables from list above based on your required length.

**.5 meter long 5 volt cable ordering number VW3S8201R05**

**1.5 meter long 5 volt cable ordering number VW3S8201R15**

**3.0 meter long 5 volt cable ordering number VW3S8201R30**

**5.0 meter long 5 volt cable ordering number VW3S8201R50**

**.5 meter long 24 volt cable ordering number VW3S8202R05**

**1.5 meter long 24 volt cable ordering number VW3S8202R15**

**3.0 meter long 24 volt cable ordering number VW3S8202R30**

**5.0 meter long 24 volt cable ordering number VW3S8202R50**

Note: The signal cable is required because the input connection of the SD3 is a Molex type connector whereas the input of the WD3 used a 15 pin D-sub

## Recommended rotation monitoring cable selection

When replacing a WD3-004.0802, WD3-004.1802, WD3-008.0802 and WD3-008.1802 you will need an encoder feedback cable to connect from the motor to the SD326 drive. To simplify the connection process select one of the cables from the list below based on your required cable length.

Encoder cable						
Encoder cable	Configured for stepper motor; shielded; motor side with 12-pin encoder plug; device side with 12-pin Molex plug	3.0 m	x	x	x	VW3S8101R30
		5.0 m	x	x	x	VW3S8101R50
		10.0 m	x	x	x	VW3S8101R100
		15.0 m	x	x	x	VW3S8101R150
		20.0 m	x	x	x	VW3S8101R200

VW3S8101R30      ordering number VW3S8101R30  
VW3S8101R50      ordering number VW3S8101R50  
VW3S8101R100    ordering number VW3S8101R100  
VW3S8101R150    ordering number VW3S8101R150  
VW3S8101R200    ordering number VW3S8101R200

## Motor cable recommendations

When replacing a WD3 product with an SD3 product the existing motor cable can be used. The motor cable will connect to the SD3 drive via terminal screws so in most cases it will not be necessary to purchase a replacement motor cable.

Please refer to the SD3 product catalogue for motor cable information in the event that your existing motor cable is damaged or needs to be replaced.

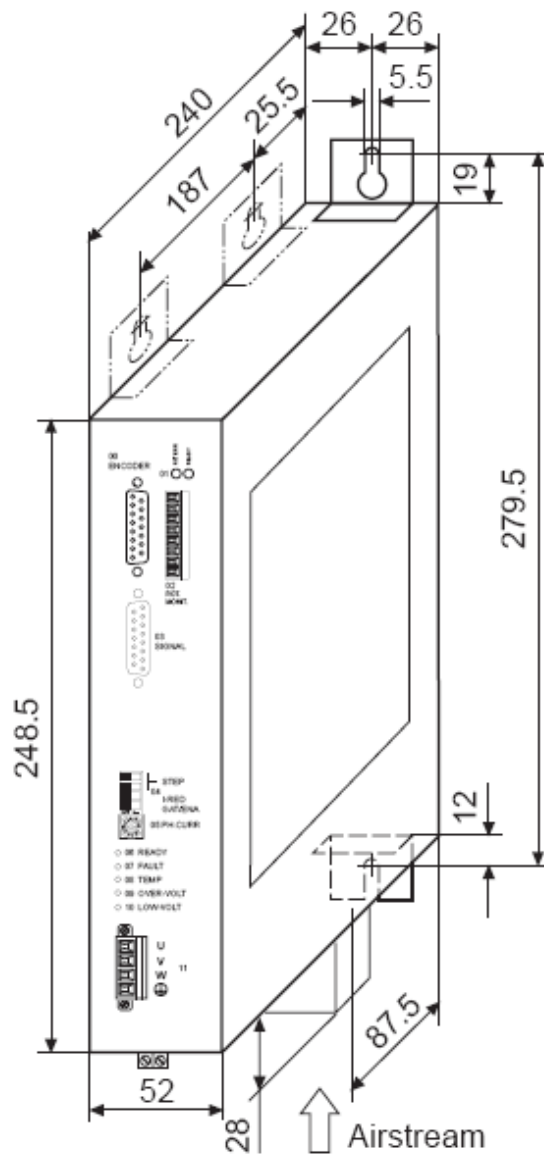
You can review SD3 catalogue for detailed information on the complete SD3 product offering including motor cables and other accessories.

SD3 Catalogue is available at the web address below.

[http://www.schneider-electric.com/download/ww/en/file/27534980-SD326\\_manual\\_V203\\_EN.pdf/?showAsIframe=false&fileName=SD326\\_manual\\_V203\\_EN.pdf&reference=0198441113694-EN&docType=User-guide](http://www.schneider-electric.com/download/ww/en/file/27534980-SD326_manual_V203_EN.pdf/?showAsIframe=false&fileName=SD326_manual_V203_EN.pdf&reference=0198441113694-EN&docType=User-guide)

## Product dimensions

## WD3 dimensions



**SD326 dimensions**

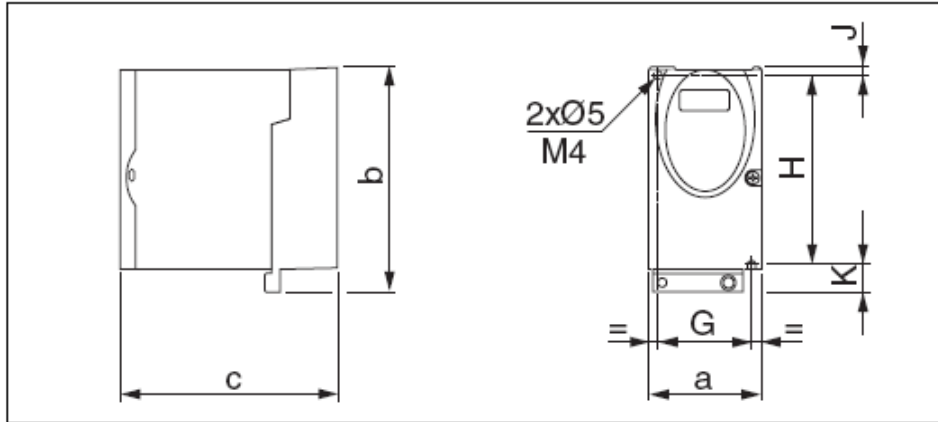


Figure 3.1 Dimensions

SD32••...		U25S2	U68S2
a	mm	72	72
b	mm	145	145
c	mm	140	140
G	mm	60	60
H	mm	121.5	121.5
J	mm	5	5
K	mm	18.5	18.5
Weight	kg	1.1	1.2
Type of cooling		Convection <sup>1)</sup>	Fan
Top-hat rail installation	mm	77.5 <sup>2)</sup>	77.5 <sup>2)</sup>

1) >1 m/s

2) Width of adapter plate

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