

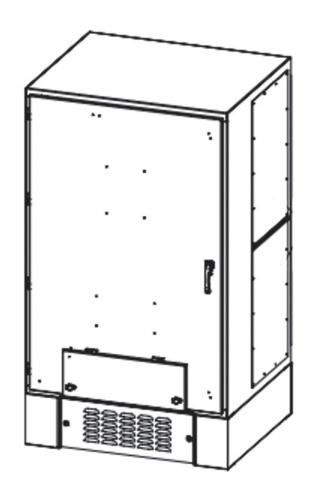
DUAL-PURPOSE DOCKING STATIONS

DATA SHEET

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Dual-purpose Docking Stations

100 - 5000A



PRODUCT INTRODUCTION

Dual-purpose Docking Stations

The Trystar dual-purpose docking station allows you to connect a portable generator and a load bank simultaneously. This saves time and money when the permanent generator needs to be serviced, because it eliminates the labor involved in hard wiring into the main breaker.

On our most common dual-purpose docking station, we use the industry standard Kirk Key mechanism to transfer power from permanent generator to temporary. In most cases, this unit sits right next to a permanent generator and the associated automatic transfer switch, and we offer several enclosures including wall-mount, flush-mount and padmount.

Key Features

• Rugged Construction:

Aluminum NEMA 3R or 304/316 Stainless Steel NEMA 4X enclosure provides durability in harsh environments.

High Ampacity Range (100-5000 AMP):

Offers flexibility to support large scale power demands across various industries. 100-4000A with UL1008 Listing, 5000A with PE-listing.

• Industry Standard Cam-lock Connections:

Series 16 Cam-Lock connectors with clear protective lids streamlines setup while preventing unauthorized access and reducing wear, ensuring operational security.

Phase Rotation Monitor:

Standard feature prevents connection errors, ensuring optimal performance and reducing potential equipment damage.

• NEC 702.12(C) Compliant:

Uses Kirk-key interlocks to prevent interconnecting temporary and permanent inputs.

IBC Seismic Certified:

Select enclosures available for seismically active areas.

Wind Rated:

Enclosures can be rated to handle the highest wind requirements (up to 180MPH).

PRODUCT SPECIFICATIONS

Electrical		
	Ampacity	100A - 5,000A
	Frequency	60Hz (50Hz)
	Voltages	120/240V, 120/240V Delta, 208Y/120V, 480V, 480Y/277V, 600V
	Interrupt Rating	65kAIC, 100kAIC
	Breakers	3-Pole, 4-Pole, Single Phase

PRODUCT SPECIFICATIONS (CONT.)

Mechanical		
	NEMA 3R	Powder Coated Aluminum
	NEMA 4X	304 or 316 Stainless Steel
	Busbar	Silver-plated Copper, Tin-plated Copper (Wastewater Facilities)
	Dimensions (H x W x D)	Dual Padmount: 84" x 96.5" x 43" Deluxe Padmount: 90" x 78.5" x 43" Padmount Extra Depth: 84" x 48" x 61" Padmount: 84" x 48" x 43" Large Wall-mount: 60" x 48" x 19.5" Medium Wall Mount: 54" x 40" x 16.5" Small Wall Mount: 48" x 30" x 16.5"
Environmental		
	Operating Temperature	32° to 104° F (0° to 40° C)
	Humidity Rating	5 - 95% relative humidity (non-condensing)
	Codes and Standards	UL50, ETL UL1008

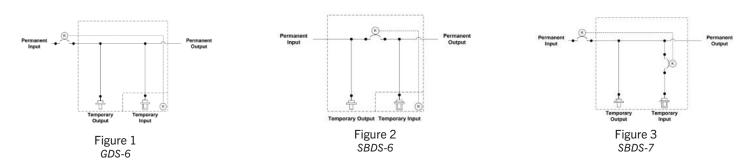
ONE-LINE DRAWINGS

GDS: Generator Docking Station

Figure 1 shows a dual purpose docking station without any breakers. In this configuration Kirk-keys are used to prevent running the temporary power while permanent is still being used by the output.

SBDS: Single Breaker Docking Station

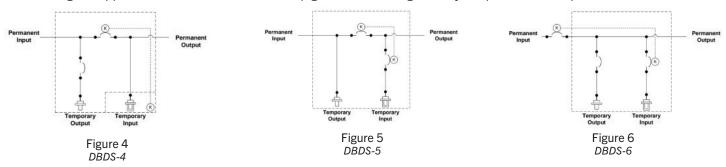
In the SBDS line of products a single breaker is used. In **Figure 2**, the breaker is interlocked using Kirk-keys so that either the permanent input can provide power to permanent output or with that breaker open the cover over the temporary inputs can be used to provide power to permanent output. This line has the added benefit of being able to use a load bank to test the permanent input. In **Figure 3**, load bank testing while providing back-up power at the same time is not possible. However, the breaker on the input allows the use of a large generator, while still protecting the system.



ONE-LINE DRAWINGS (CONT.)

DBDS: Dual Breaker Docking Station

Dual breaker docking stations will always have 2 breakers. In **Figure 4**, Kirk-keys are used between the breaker and the camlock panel cover. This configuration has the benefit of being able to operate a temporary input while load bank testing your permanent input. Protection is also provided to the load bank if that is not already available from the load bank or some other connection. The DBDS – 5 in **Figure 5**, is like the prior option where here we remove the camlock cover and use a second interlocked breaker. Often this interlocking is cam-controlled breakers on wall mounts and breaker mounted Kirk-keys on the padmount frame. Final example of the DBDS one-lines is **Figure 6**, In this one we are using 2 breakers where one breaker in within the enclosure and the other in outside or closer to the utility. Using this configuration does not allow load bank testing to happen at the same time as a back up generator is being used by the permanent output.

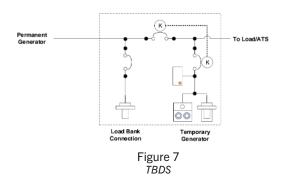


TBDS: Triple Breaker Docking Station

In the triple breaker docking station one-line, **Figure 7**, the breakers selecting between the permanent power and the temporary power are interlocked using Kirk-keys, and the line to the temporary output is also breaker protected. In these configurations there allows for load bank testing of the permanent generator at the same time as the temporary generator is being used.

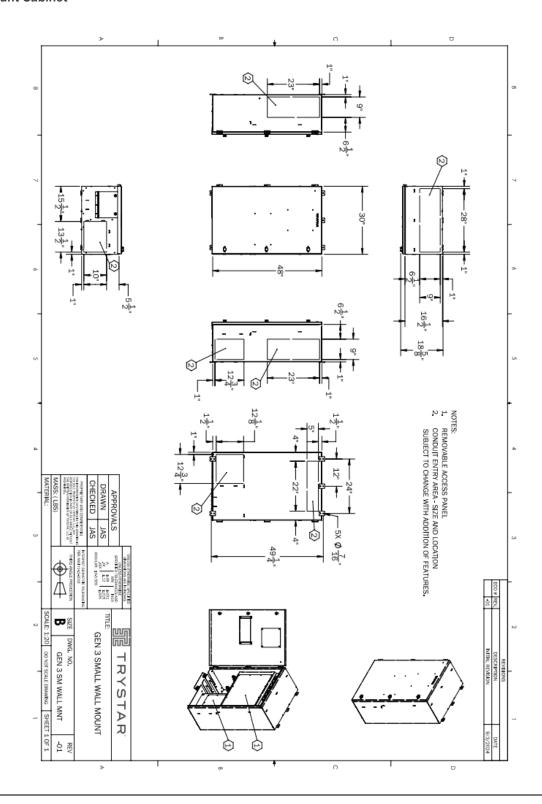
Other Dual Purpose Docking Stations

Trystar does offer other configurations that offer dual purpose functions. Offers such as the DBDS-20 are covered in their own documents. Automatic Transfer Switches (ATS) and Manual Transfer Switches (MTS) with the dual purpose functionality are covered in their respective documents.



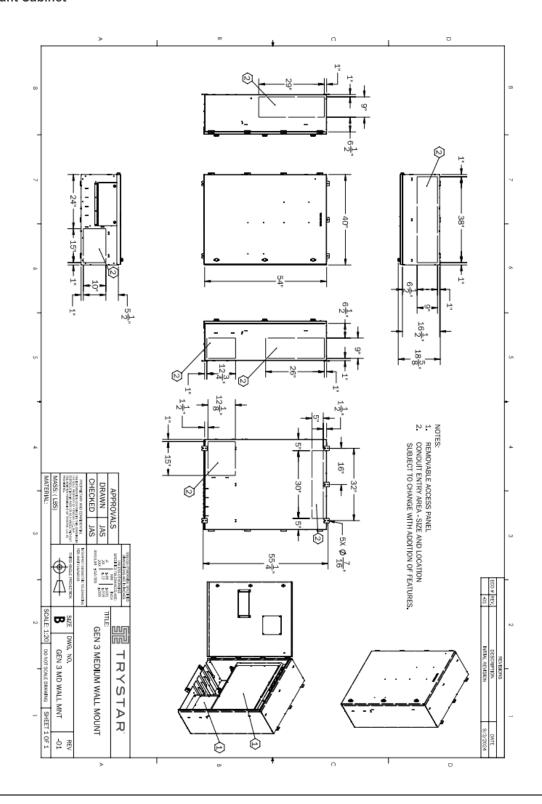
CABINET DRAWINGS / DIMENSIONS

Small Wall-mount Cabinet



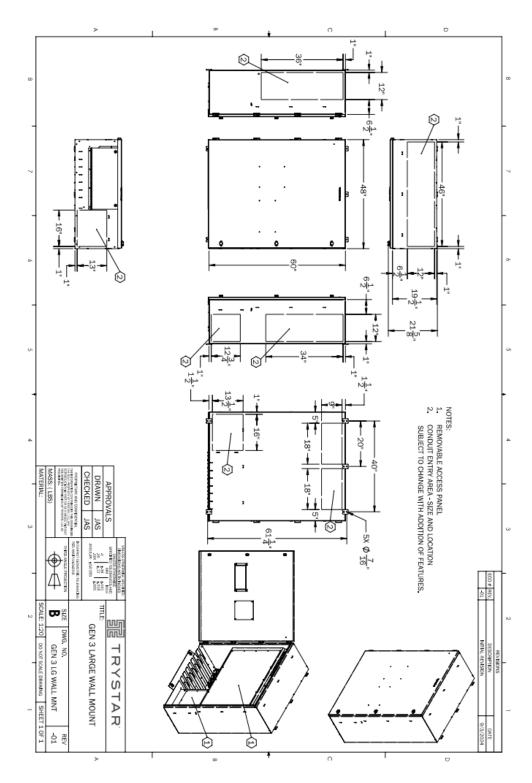
CABINET DRAWINGS / DIMENSIONS (CONT.)

Medium Wall-mount Cabinet



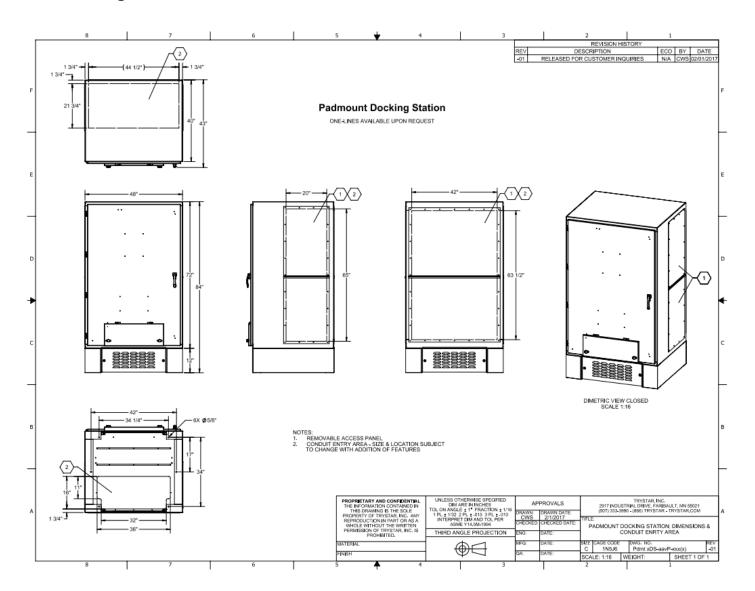
CABINET DRAWINGS / DIMENSIONS (CONT.)

Large Wall-mount Cabinet



CABINET DRAWINGS / DIMENSIONS (CONT.)

Padmount Docking Station



ORDERING INFORMATION

Catalog no.	Description	
GDS	Non-Breaker Docking Stations, Dual Purpose	
<u>X</u> BDS	$\underline{\mathbf{S}}$ B = Single / $\underline{\mathbf{D}}$ B = Dual / $\underline{\mathbf{T}}$ B = Triple Breaker Docking Station, Dual Purpose	

