

# Wind Power

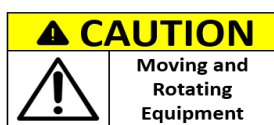
## Application Guide

## CATALOGO F

### Risks

The global rise of renewable energy, especially wind turbines, creates new complexities within the safe operations of power generation, transmission, distribution, and maintenance of new energy equipment.

Maintenance and operators at wind power facilities are faced with various risks such as:



**Equipment in Motion**



**Confined Space**



**Fall from Heights**



**Electrical Hazards**

These critical areas of application put personnel and equipment at risk and even pose life threatening situations.

The smooth operation of a wind power facilities and the protection of personnel requires a safety solution that mitigates risk and eliminates human error. Trapped key interlock solutions are customized to each user's procedures with a predetermined sequence of operations ensuring power is fully isolated, operations are followed, and safe access is available.

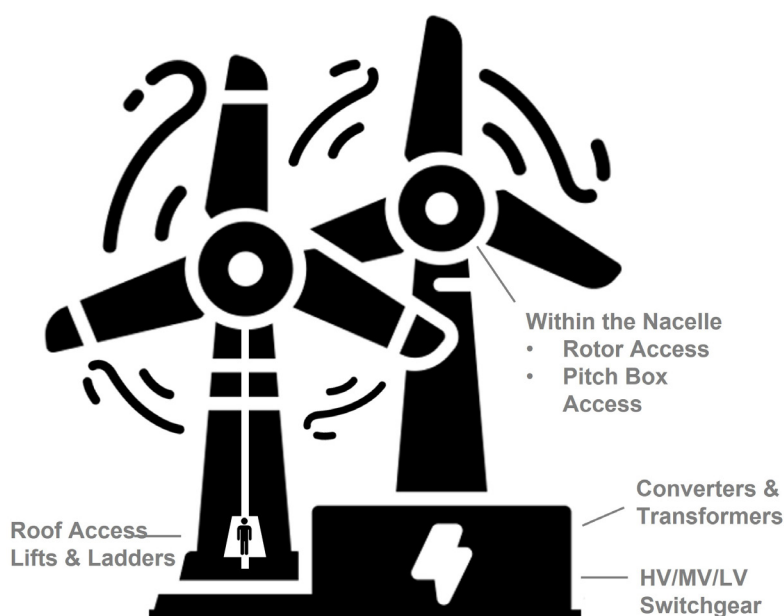
### Where Trapped Key Solutions can be Found

On or off-shore wind power equipment can be safely protected by a trapped key interlock solution.

These solutions can be fully integrated throughout the turbine or single applications for specific maintenance requirements.

Safety solutions include:

- Roof access / lifts & ladders
- Converters & Transformers
- HV/MV/LV Switchgear
- Rotor access
- Pitch Box



## Benefits of Trapped Key Interlocking

Why use a trapped key interlock safety solution?

To **PROTECT** personnel from hazards ensuring predetermined sequences of operations are followed.  
To **PREVENT** loss of operations and setback due to equipment damaged by mis-followed operations.  
To **PROVIDE** risk control and peace of mind; eliminating human error and ensuring everyone has the right to be safe at work!

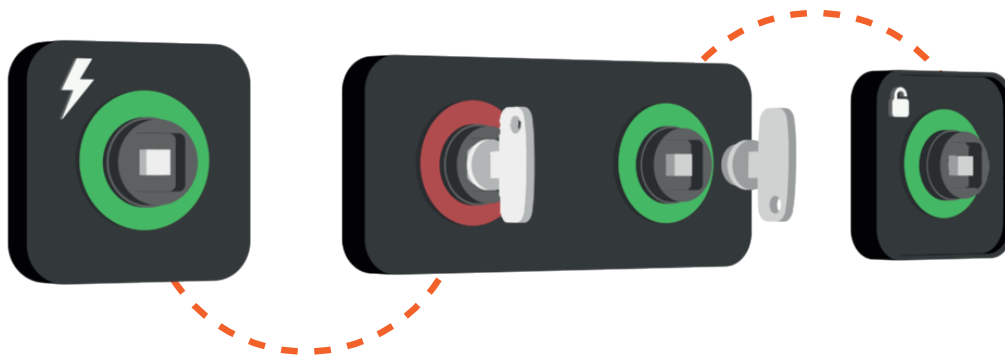
A trapped key interlock solution is;

**INTEGRATABLE** onto new equipment or retrofit into existing procedures and equipment.

**CUSTOMIZABLE** to your specific safety requirements through the sequenced design and or with custom product.

**RELIABLE** and robust safety solution that can withstand harsh environments, maintaining the integrity of the safety solution .

## How a Trapped Key Interlock Solution Operates



### 1 Isolation

Power is isolated. The key can be removed and taken to the key exchange.

### 2 Key Exchange

The initiating key from step 1 is inserted into the key exchange, releasing the access key(s) and trapping the initiating key.

### 3 Access Control

Access key(s) can be taken to the appropriate access door(s) and personnel can safely perform maintenance and operations.

Power can only be restored when maintenance is complete, trapped key solution is followed in reverse, returning all access keys, and releasing initiating key to restore power.

## Together for a Safer Tomorrow

**Sentric unites the world's leading brands** to create the long-term protection of people, productivity and business reputation. Sentric group consists of four sister companies - **Kirk in the US, STI in FR and Castell & Zonegreen in the UK.**

Our brands and businesses have been leading the industry in keeping people safe at work in their **sectors for over 100 years.** Together we have the expertise and experience to help our customers reduce risk, keep costs down and businesses protected and compliant. But most importantly, ensuring everyone gets home safe at the end of the day.

**Sequential Safety Process**  
**Eliminating Human Error**  
**Preventing Drive Aways**

# Salvo™

## SAPD Automatic Safety System for Power Doors



The power door system uses the Salvo Control Panel (SCP) to prevent the up/down controls of the power door from operating until the Salvo Gladhand (SGL) has been applied to the trailers air brakes. Once the SGL has been engaged, the key is released and can be inserted into the SCP. This ensures that the truck cannot drive away until the unloading/loading process is completed and the dock door is closed. The key can then be released from the SCP and inserted back into the SGL, disengaging the SGL and allowing the air brakes to be reconnected and the truck to drive away safely.







# Salvo™

SALVO LOADING DOCK SAFETY KIT	DOCK DOOR TYPE	DOCK SAFETY EQUIPMENT INTEGRATION	COMPATIBLE FOR OPEN SIDED LOADING PLATFORMS	GANGWAY COMPATIBLE	TRAFFIC SAFETY LIGHT
SAPD	POWER	YES	NO	NO	YES

### SAPD Kit

PRODUCT	PART NUMBER	DESCRIPTION
Salvo Gladhand	SALVO SGL	The Salvo Glad Hand Lock (SGL) is a key operated mechanical locking device designed to fit on US trailer emergency brake line connectors. Its purpose is to prevent re-connection of the air brake hose, immobilizing the trailer, while loading/unloading is taking place.
Salvo Control Panel	SALVO SCP	The Salvo Control Panel Plus (SCP) is the main interface between the Salvo couplings and associated dock door controls. The SCP is comprised of a wall mounted panel with easy to use Castell interlock key switch to allow operation of the dock. There is also a panel indicator light that clearly shows the status of operation.
Salvo Power Supply & Beacon	SALVO BEA	The Salvo Power Supply & Beacon (SPSB-US) is mounted to the interior wall of the warehouse, adjacent to the loading dock, providing notification that the trailer has been immobilized and it is safe to open the dock door and commence loading or unloading. The SPSB-US converts 110/240V to 24V DC to power the SCP, providing a safer power level at the user interface.
Salvo Limit Switch (for use with sectional doors)	SALVO LS	The Salvo Safety Limit Switch comprises a mechanical roller switch and bracket set. It is mounted so that the roller is actuated by the opening and closing of the loading dock door. It should be mounted in accordance with these instructions, in a raised position to prevent accidental damage.
Salvo Safety Proximity Sensor (for use with roller doors)	SALVO PS	The Salvo Safety Proximity Sensor is designed for use with roller shutter doors, where mechanical roller switches cannot be used. It should be mounted in accordance with these instructions, as close to the door frame as possible, to prevent accidental damage.
Salvo Door Sensor	<i>Inquire for details</i>	The Salvo Door Sensor is designed for use with all doors, when door down confirmation signal is available from door control panel. Where door down confirmation signal is not available from door control panel, a dual redundant system is met by using Salvo Door Sensor plus an additional Salvo sensor.
Salvo Outside Traffic Light (24V)	SALVO TRL24	The Salvo Traffic Light is used where larger red and green lights are required to communicate with drivers not to pull away until the green light is on. The lights are ideally located in a highly visible area along with the Salvo Traffic Light Sign.
Salvo Sign Kit	SALVO SIGN-L SALVO SIGN - S	The Salvo Sign Kit includes one exterior sign for outside the dock door and one interior sign for inside the warehouse. The exterior sign refers to the traffic light and reads "Move on Green Only" and the interior sign refers to the interior beacon and reads "Enter on Green Only".

### OPTIONAL ACCESSORIES

			
<b>PRODUCT:</b> Salvo Master Key	<b>PRODUCT:</b> Salvo Master Gladhand	<b>PRODUCT:</b> Salvo Club	<b>PRODUCT:</b> Salvo Storage Enclosure
<b>PART NUMBER:</b> SALVO MKR	<b>PART NUMBER:</b> SALVO MGL	<b>PART NUMBER:</b> SALVO CL	<b>PART NUMBER:</b> SALVO SE

