

BVP53-CBACN	TMR Valve Position Control Base Module (for MVP53)	21.6-26.4VDC	0.1W
2oo3-CBACN	2oo3 Relay module	21.6-26.4VDC	1.5W
TCBT-CBACN	Top Train Connection Board	20.4-28.8VDC	<0.1W
TCBB-CBACN	Bottom Train Connection Board	20.4-28.8VDC	<0.1W
SDO60-CBACN	SIL Digital Output Module	20.4-28.8VDC	2W
BSDO60-CBACN	SIL 6CHs Base Board Module	20.4-28.8VDC	12W
SPU60-CBACN	SIL Control Module	20.4-28.8VDC	5W
BSPU60-CBACN	SIL Base Board Module	20.4-28.8VDC	<0.1W
SAI60-CBACN	SIL 8 Channel Analog Input Module	20.4-28.8VDC	5W
BSAI60-CBACN	SIL 8 Channel Analog Input Base Board Module	20.4-28.8VDC	6W
SDI60-CBACN	SIL 24 Channel Digital Input Module	20.4-28.8VDC	5W
BSDI60-CBACN	SIL 24 Channel Digital Input Base Board Module	20.4-28.8VDC	2W

2.0 MODULE INFORMATION

2.1 Ordering Information

The ordering information for the modules following hazardous area modules that are different than the ordering information in the Nexus Hardware Manual, NCM118586, are shown below in Table 2.

Table 2: Ordering Information

Item Code	Module Name	Description
MDO53-CBACN	MDO53	MDO53 DO Module, AC Relay 16CH, CN, IECEX
BLP50-CBACN	BLP50	BLP50, Prog. Logic Prot. Base, CN, IECEX
BSDO60-CBACN	BSDO60	SDO60 6CHs BASE BOARD MODULE, CN, IECEX

For all other module ordering information please refer to the Nexus Hardware Manual, NCM118586.

2.2 Specifications

The following specifications are unique to the IECEX certified Nexus OnCore modules, covered by this manual addendum:

The MDO53-CBACN module has all the same specifications as 369B1844G5004, except the relay parameters. The features of 369B1844G5004 can be found in NCM118586. The relays on the MDO53-CBACN modules that are certified to IECEX have the following specifications:

- Resistive Load Limited to: 8A/30VDC
- Inductive Load Limited to: 4A/30VDC

The BLP50-CBACN module has all the same features as 369B1877G0007, except the relay parameters. The features of 369B1877G0007 can be found in NCM118586. The relays on the BLP50-CBACN modules that are certified to IECEX have the following specifications:

- Resistive Load Limited to: 4A/30VDC
- Inductive Load Limited to: 2.5A/30VDC

The BSDO60-CBACN module has all the same specifications as 369B1844G5010, except the relay parameters. The features of 369B1844G5010 can be found in NCM118617. The relays on the BSDO60-CBACN modules that are certified to IECEX have the following specifications:

- Resistive Load Limited to: 4A/30VDC
- Inductive Load Limited to: 2.5A/30VDC

For all other module specifications please refer to the Nexus OnCore Hardware Manual and Nexus OnCore Safety System Hardware Manual, NCM118586 and NCM118617.

3.0 HAZARDOUS AREA STANDARDS

The Nexus OnCore modules listed in Table 1 above are certified to the following standards:

- IEC/EN 60079-0; CSA STD C22.2# 60079-0; UL STD 60079-0
- IEC/EN/UL/CSA 60079-7; CSA STD C22.2# 60079-7; UL STD 60079-7
- IEC/EN/UL/CSA 60079-15; CSA STD C22.2# 60079-15; UL STD 60079-15

4.0 AREAS OF APPROVED USE

The Nexus OnCore modules listed in Table 1 are certified for use in Class I, Division 2 or Class I, Zone 2 environments. Environments classified as Class I, Division 2 or Class I, Zone 2 restrict the presence of hazardous gasses, liquids, or vapors to occasional unique conditions outside of normal operation. As such, the instrumentation in these environments must be rated against ingress protection to a level of IP54. In the case of the Nexus OnCore modules, this requires use of a weatherproof enclosure with sufficient clearance to provide heat dissipation. Requirements surrounding instrumentation installation in Zone 2 or Div 2 environments are derived from IEC 60079-0 and IEC 60079-15 standards.

The Nexus OnCore Modules are certified for operation in environments within an ambient temperature rating of -20°C to +50°C. The recorded maximum surface temperature of the Nexus

OnCore modules is below the values stated within Table 2 of IEC 60079-0 after the 5K de-rating factor called out for 135°C and 200°C (T4) for all the small components.

Regardless of operating environment, these maximum surface temperatures should be considered by anyone performing maintenance procedures that may require handling system components as the hazard of burns may exist.

5.0 HAZARDOUS AREA INSTALLATION REQUIREMENTS

NOTE

The agencies and authorities charged with enforcement for a region or site category are the final dictators of whether a system is suitable for installation. Changing regulations, or regional variation in regulations may put installation requirements on a system that diverge from the recommendations in this manual.

Installation of a system in a Division 2 or Zone 2, hazardous area environment should adhere to best practices listed below. Additionally, most sites will have specific requirements that address the unique features of the specific application. Site specific requirements will be established at the time that the installation is certified.

- 1) The Nexus OnCore modules have been assessed for use in Group IIC Division 2 or Zone 2 environments. The modules must be installed in a suitable IECEx certified Ex e enclosure and minimum ingress protection IP54 enclosure. The enclosure shall be suitable for an ambient temperature range of -20°C to +50°C and a service temperature of 90°C. It is the responsibility of the end user to maintain the ambient conditions for the equipment. It is also the end users' responsibility to choose the appropriate enclosure.
- 2) Follow the installation wiring diagrams, specific conditions of safe use, and hazardous area certificates, that come with the product when installing in hazardous areas.
- 3) Appropriate relevant authorities must review and approve all hazardous area installations prior to energizing the product. These authorities should also be consulted in the occurrence of significant system upgrades or parts replacement as well.
- 4) Relay contacts may be energized by potentially hazardous voltages even when power to the modules has been disconnected. Take proper precautions to ensure that these voltages do not pose a hazard when maintenance or system upgrades are performed.
- 5) The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.
- 6) When installed in a metal enclosure, the enclosure shall have an external facility for an earth bonding connection, which complies with IEC 60079-0:2011 clause 15.1.2 / EN 60079-0:2012/A11:2013 clause 15.1.2 and which is electrically in contact with the internal earth connection facility on the equipment.
- 7) Cable and cable entry devices shall be suitable for a maximum ambient temperature of 90°C.