APTER■POWER

PRODUCT TECHNICAL REFERENCE

INDUSTRIAL AUTOMATION PRODUCT

FC-SDI-1624

Safe Digital Input Module

Sixteen 24 V DC safety-related discrete-input states

IDENTITY	VERIFIED VALUE
Manufacturer	Honeywell
System family	Honeywell Safety Manager
Part number	FC-SDI-1624
Country	USA
HS code	8537101190

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2 Technical Specifications

Technical values below are limited to the named Honeywell product record.

PARAMETER	TECHNICAL VALUE
Input channels	16
Nominal input	24 V DC
Input current	7 mA at 24 V DC
Maximum input voltage	36 V DC
HIGH threshold	>15 V DC
LOW threshold	<9 V DC; <2 mA
Input delay	10 ms typical
Maximum input capacitance	100 nF
Output type	24 V DC solid-state; short-circuit proof
Maximum output current	450 mA
Maximum output capacitance	32 uF
Output voltage drop	<1.5 V at 450 mA
5 V DC current	8 mA
24 V DC internal current	110 mA
24 V DC external current	110 mA input current
Supply ripple	<0.5 V peak-to-peak; 0 to 360 Hz
Module size	4TE, 3HE (4HP, 3U)
Approvals	CE, TUV, UL, CSA, FM

3 System Role and Architecture

Sixteen 24 V DC safety-related discrete-input states

FUNCTION 1

Monitors sixteen safe discrete channels

FUNCTION 2

Uses documented HIGH and LOW voltage thresholds

FUNCTION 3

Applies a typical ten-millisecond input delay

FUNCTION 4

Provides protected 24 V DC output support for field circuits

Matched system components

- Safety Manager I/O chassis
- 24 V DC field supply
- safety switches and contacts
- validated safety input application

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	Safety Manager I/O chassis
Companion hardware	24 V DC field supply
Field connection	safety switches and contacts
Primary system function	Monitors sixteen safe discrete channels
Controlled acceptance duty	Emergency-stop input acquisition

4 Applications and Engineering Context

Emergency-stop input acquisition

Monitors sixteen safe discrete channels

Burner-permissive monitoring

Uses documented HIGH and LOW voltage thresholds

Guard-switch safety input

Applies a typical ten-millisecond input delay

Safe-input module renewal

Provides protected 24 V DC output support for field circuits

TECHNICAL NOTE

Isolate internal and external supplies, record every input state and field-return path, then simulate both LOW and HIGH conditions before releasing the safety function.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	FC-SDI-1624 / FC-SDI-1624 recorded
Physical interface	Safety Manager I/O chassis
Companion check	24 V DC field supply
Functional proof	Monitors sixteen safe discrete channels
Application test	Emergency-stop input acquisition

5 Engineering Precautions

1. Verify the complete FC-SDI-1624 marking and its assigned sixteen-channel safe-input position before work.
2. Place the connected process and control strategy in the approved maintenance state.
3. Isolate the applicable cabinet supply and 24 V input field energy before disconnecting conductors.
4. Record terminal numbers, channel assignments, polarity, shields and configured ranges before removal.
5. Use ESD controls and protect the backplane connector, terminal hardware and coated electronics.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
FF-SRS59252	Related industrial automation product	**View FF-SRS59252 page**
621-2100R	Related industrial automation product	**View 621-2100R page**
900H03-0102	Related industrial automation product	**View 900H03-0102 page**
MU-TSDM02	Related industrial automation product	**View MU-TSDM02 page**
900G03-0102	Related industrial automation product	**View 900G03-0102 page**
900G02-0102	Related industrial automation product	**View 900G02-0102 page**
900B01-0101	Related industrial automation product	**View 900B01-0101 page**
DC-TFB402	Related industrial automation product	**View DC-TFB402 page**

MANUFACTURER SOURCE RECORD

Honeywell Safety Manager Hardware Reference

EP-SM.MAN.6284, Issue 1.10

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