

## Digital input module

DI	M3-16E
DI	M3-16F

**M3-16E:** 32 sourcing inputs (+VS VDC)

**M3-16F:** 16 sourcing inputs (+VS VDC)

- ▶ Wide input hysteresis voltage for solid switch points
- ▶ Individual channel status LEDs
- ▶ Optically isolated

### General specifications

Inputs per module:	
M3-16E	32
M3-16F	16
Input type	VDC sourcing
Connection	Removable terminal block
Connection type	Tension clamp
Terminal block part number	069-621010
Terminal wire size (UL 1059)	18 - 22 AWG
Test point	All connections
Status indicator	One LED per channel
Module size	1 rack slot (0.75"/19 mm)
Isolation rating	500 VDC
Operating temperature	
Horizontal installation	0 - 50°C
Vertical installation	0 - 45°C
Storage temperature	-25 - 85°C
Humidity	5 - 95% non-condensing



Actual size

Minimum hardware revision	A, B
Minimum firmware revision	1.02
Minimum operating system revision	5.00.90
Documentation number: 950-531605-001	

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## Performance specifications

Parameter	Value
Input voltage (VS)	10 - 32 VDC
Max voltage	32 VDC
Nominal voltage (VN)	24 VDC
Turn ON threshold	0.46 * VS
Turn OFF threshold	0.12 * VS
Min hysteresis voltage	0.17 * VS
Min input current	2.6 mA @ 24 VDC
Input resistance to VDC RTN	10 K $\Omega$ $\pm$ 10%
Min ON current	1.6 mA
Max OFF current	0.3 mA
Hardware filter	< 1 msec

## Digital input module

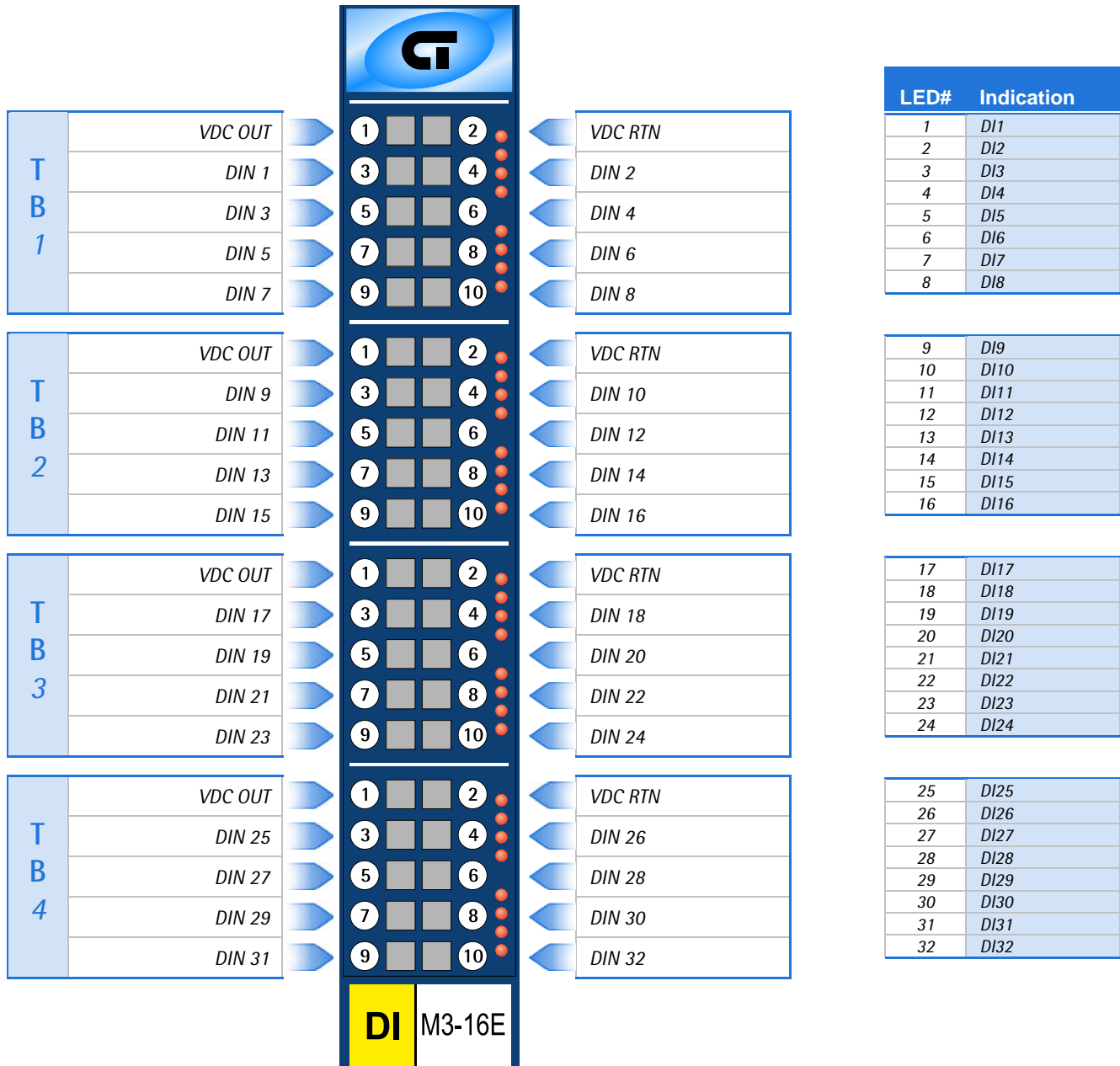
DI	M3-16E
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DI	M3-16F
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M3-16E: 32 sourcing inputs (+VS VDC)

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### Terminal block connections



#### Note

1. TB3 and TB4 not available on M3-16F.

## Digital input module

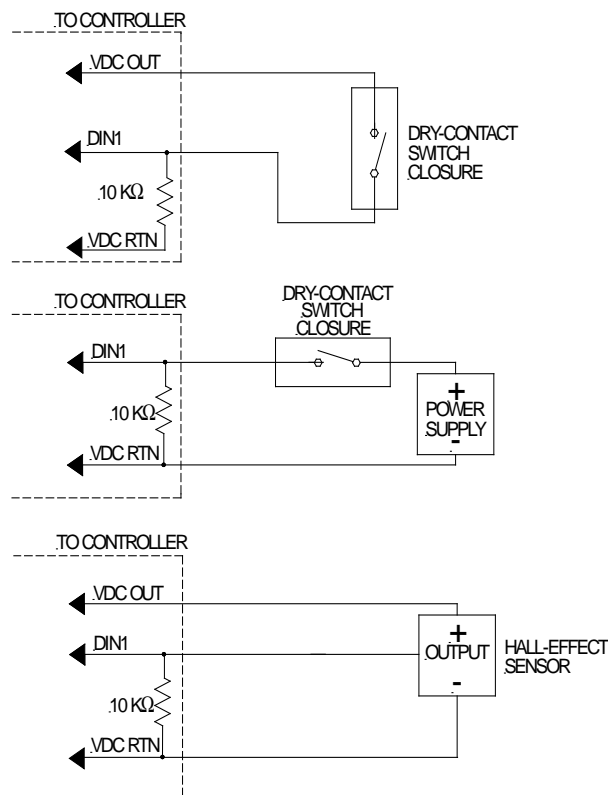
DI

M3-16E

DI

M3-16F

## Application information



### Notes

1. When a digital device is powered via an external power source, it may be necessary to tie the ground of this power source to the controller's voltage supply ground (VDC RTN).
2. For register and programming information, refer to the appropriate controller Applications Guide.
3. The information and illustrations contained herein are the property of Control Technology Corporation and are subject to change without notice. Data based on  $V_S = 24\text{ VDC}$  @  $25^\circ\text{C}$  unless otherwise noted. For additional information and/or updates, visit [www.ctc-control.com](http://www.ctc-control.com). Copyright © 2007 2012 Control Technology Corporation. All Rights Reserved.
4.  $VDC\ OUT = V_S$  (DC voltage supplied to controller's power supply).