



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Altech Corp.®

Serving the Automation & Control Industry since 1984

Quality System



Quality
Endorsed
Company

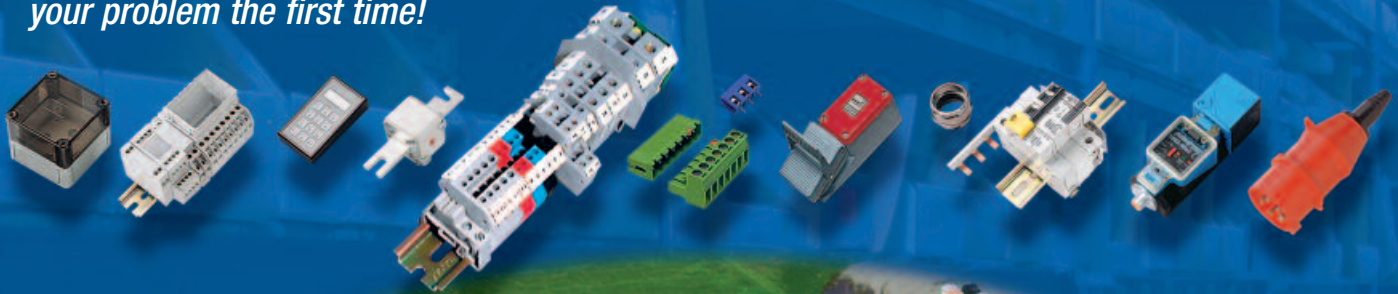


Interface Modules & Industrial Relays

Altech Corp.®

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

With experienced Product Engineers and Customer Service personnel, Altech provides solutions to your most pressing application challenges. All with one thought in mind - *to ensure that we solve your problem the first time!*



Quality Commitment

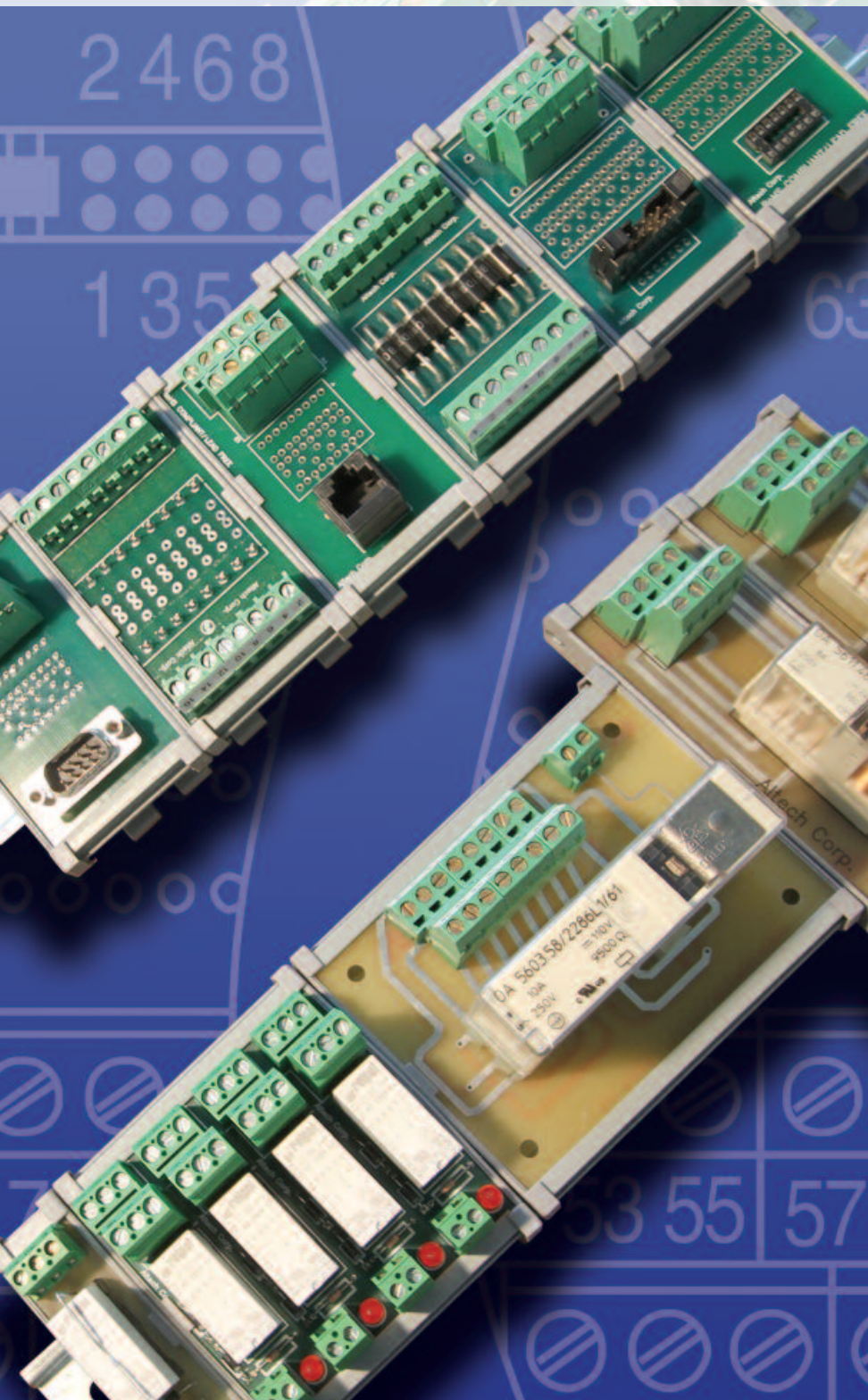
Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.



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INTERFACE MODULES

Altech®



Link incompatible hardware or expand the capabilities of logic systems with Altech interface and electronic modules and carriers. These DIN Rail or panel mounted printed circuit board modules, subsystems and carriers give design flexibility, simplify panel layouts and reduce maintenance and downtime.

Altech's compact interface modules provide a flexible, cost effective transition from Sub-D, Ribbon Cable and other connectors to terminal blocks.

Altech's electronic modules include Diode, Fuse, Varistor, Optocoupler (I/O), Relay, power supplies and custom modules.

If your needs go beyond our comprehensive range of standard interface and electronic modules, Altech can custom design a module to meet even the most sophisticated requirements.

Modules are supplied completely assembled with ready to wire screw-cage terminal blocks in an extruded track. The track can be mounted on 35 or 32mm DIN Rail or can be panel mounted. Select individual components and mount your own electronic boards with Altech mounting tracks.

CONNECTOR-TO-TERMINAL BLOCK

Compact and reliable transitions between high density connectors and high quality screw-cage clamp terminal blocks.

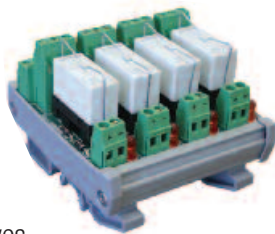
- FBK Ribbon Cable, up to 64 poles
- Subminiature - D, up to 50 poles



MINIATURE RELAYS

Traditional relay and safety relay modules in a high density package.

- Protect equipment
- Provide insulation
- Control motors, solenoid and valves
- Safety relays for emergency stop, safety gate and two-hand stop



DIODE MODULES & COMPONENT CARRIERS

Use our Diode Modules to build lamp test circuits, decouple signals, etc. Mount your own components into our Component Carriers (supplied without electronic components). Or, tell us what you need and we'll install it for you.



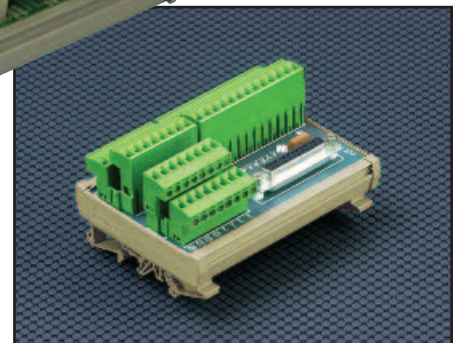
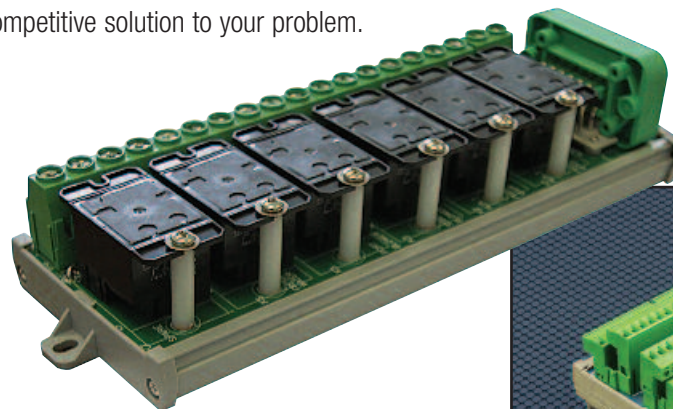
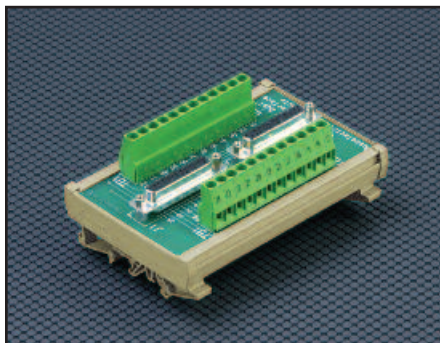
- DM Diode Modules have series connection 1A or 3A diodes, and 1A diode gates with common cathodes or anodes, providing commonly used diode arrangements
- BSM Component Carrier has factory installed fork-and eyelet soldering posts in each series trace
- CCA Component Carrier consists of a printed circuit board with four in-line and two bus-connection through-holes to solder pads in each trace, complete with terminal blocks

CUSTOM INTERFACE MODULES

If your design or application requires more functionality or features than our standard product, Altech offers complete engineering, prototype and production services for custom modules.

Our staff has the ability to take your design or requirements and manufacture your custom module. Custom module production generally includes engineering, PCB layout and prototypes, packaged in Altech extrusions for mounting on panels or DIN Rail. In many industrial control systems, customized designs are the solution for many problems.

Altech provides a quick turnaround and competitive solution to your problem.



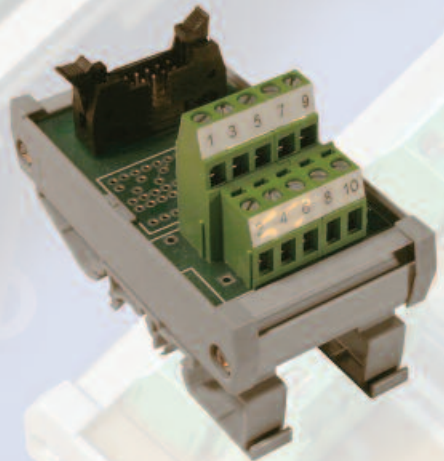
CONNECTOR TO TERMINAL BLOCK MODULES

INTERFACES CONNECTOR-TO-WIRE

Ribbon Cable Module 35 or 32 mm DIN Rail

Compact Ribbon Connector Modules provide an interface between multi-wire flat cables outfitted with IDC connectors and discrete wires. Up to 64 conductors can be terminated saving time and eliminating wiring mistakes. No special wiring or tools are required. Ribbon Cable Interface Modules are typically used in communications, data processing, process control and other industrial applications. FBK Ribbon Cable Modules are supplied with short strain relief ejector latches (long ejector latches are available), screw-cage clamp terminal blocks and component solder pads for easy insertion of circuit building components. All terminal blocks are individually marked to correspond to the numbers on the header pins.

- Screw-Cage Clamp Connections
- Spring Clamp Connections Available
- Up to 64 Poles
- 4 to 5 Component Solder Pads Per Line
- .9mm (.035 in.) Diameter Component Mounting Holes
- DIN Rail Mount and Panel Mount Available



INTERFACES CONNECTOR-TO-WIRE

Subminiature D Module 35 or 32 mm DIN Rail

Compact Subminiature D (Sub D) Modules provide quick and reliable interfaces between high density connectors (back shells) with up to 50 poles and discrete wires. Connector-to-Wire Interface modules save time and eliminate wiring mistakes. No special tools are required. Sub D Interface modules are typically used in communications, data processing, process control and other industrial applications. Keyed by design, Sub D Modules are equipped with male or female connectors, screw-cage clamp terminal blocks, and component solder pads for easy insertion of circuit building components. All terminal blocks are individually marked to correspond to the numbers on the connector pins or sockets.

- Screw-Cage Clamp Connections
- Spring Clamp Connections Available
- 4 to 5 Component Solder Pads Per Line
- .9mm (.035 in.) Diameter Component Mounting Holes
- DIN Rail Mount, Panel Mount Available
- SD-F50 and SD-M50 are double-sided boards and do not have component solder pads.



Interface Modules

Connector to terminal block modules

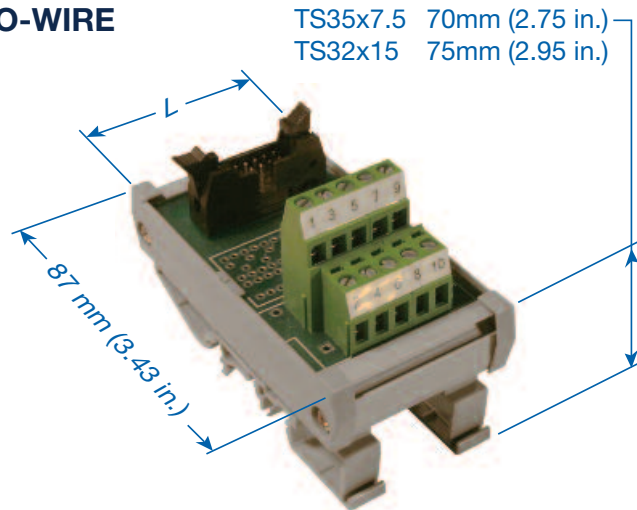


INTERFACES CONNECTOR-TO-WIRE

Ribbon Cable Module

35 or 32mm DIN Rail Mount

FBK



Technical Information

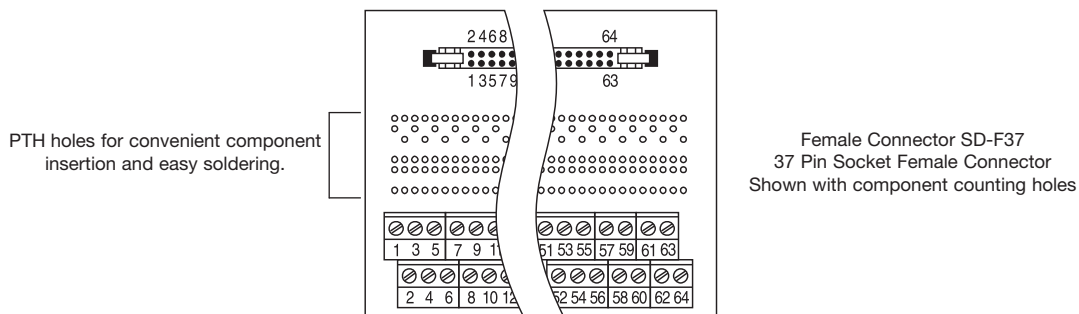
Current3 A
 Voltage250V AC
 Wire Range0.5-4 mm² / 22-12 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SCREW CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5720.2	FBK10	10	46 (1.81)	1
5721.2	FBK14	14	46 (1.81)	1
5722.2	FBK16	16	68 (2.68)	1
5723.2	FBK20	20	68 (2.68)	1
5724.2	FBK26	26	80 (3.15)	1
5725.2	FBK34	34	93 (3.66)	1
5726.2	FBK40	40	114 (4.49)	1
5727.2	FBK50	50	139 (5.47)	1
5728.2	FBK60	60	180 (7.09)	1
5729.2	FBK64	64	180 (7.09)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5720.2/S	FBK10	10	46 (1.81)	1
5721.2/S	FBK14	14	46 (1.81)	1
5722.2/S	FBK16	16	68 (2.68)	1
5723.2/S	FBK20	20	68 (2.68)	1
5724.2/S	FBK26	26	80 (3.15)	1
5725.2/S	FBK34	34	93 (3.66)	1
5726.2/S	FBK40	40	114 (4.49)	1
5727.2/S	FBK50	50	139 (5.47)	1
5728.2/S	FBK60	60	180 (7.09)	1
5729.2/S	FBK64	64	180 (7.09)	1



Other models available; please contact Altech.

SuffixDescription
 noneScrew Terminal; DIN Rail Mount
 /SSpring Terminal; DIN Rail Mount
 /PScrew Terminal; Panel Mount

SuffixDescription
 /LScrew Terminal; Long Latch Connector; DIN Rail Mount
 /SLSpring Terminal; Long Latch Connector; DIN Rail Mount
 /SPSpring Terminal; Panel Mount

Example: Part Number 5727.2/L for Long Latch model.

Interface Modules

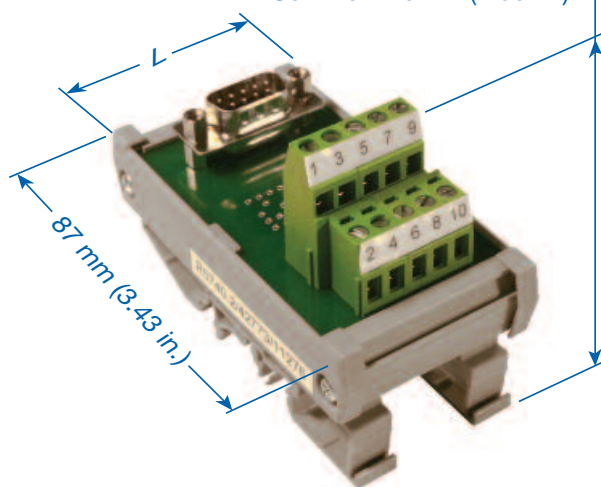
Connector to terminal block modules

INTERFACES CONNECTOR-TO-WIRE

Subminiature SD Male Module

35 or 32 mm DIN Rail Mount

TS35x7.5 70mm (2.75 in.)
 TS32x15 75mm (2.95 in.)



Technical Information

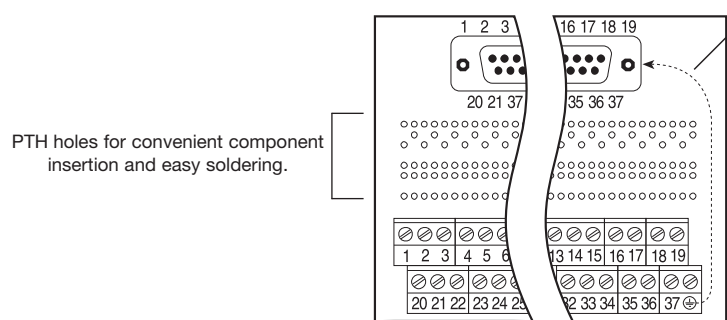
Current4 A
 Voltage250V AC
 Wire Range0.5-4 mm² / 22-12 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SCREW CLAMP

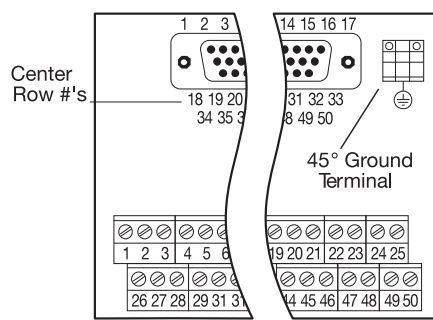
Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5740.2	SD-M9	9	45 (1.77)	1
5741.2	SD-M15	15	53 (2.09)	1
5741.3*	HDSD-M15	15	53 (2.09)	1
5742.2	SD-M25	25	80 (3.15)	1
5743.2	SD-M37	37	113 (4.45)	1
5744.2 ^{a,b}	SD-M50	50	136 (5.35)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5740.2/S	SD-M9	9	45 (1.77)	1
5741.2/S	SD-M15	15	53 (2.09)	1
5741.3/S*	HDSD-M15	15	53 (2.09)	1
5742.2/S	SD-M25	25	80 (3.15)	1
5743.2/S	SD-M37	37	113 (4.45)	1
5744.2/S ^{a,b}	SD-M50	50	136 (5.35)	1



Female Connector SD-F37
 37 Pin Socket Female Connector
 Shown with component counting holes
 (pads are on solder side)



Female Connector SD-F50
 50 Pin Socket Female Connector
 Shown with no component solder pads

Other models available; please contact Altech.

SuffixDescription
 noneScrew Terminal; DIN Rail Mount
 /SSpring Terminal; DIN Rail Mount
 /PScrew Terminal; Panel Mount

SuffixDescription
 /LScrew Terminal; Long Latch Connector; DIN Rail Mount
 /SLSpring Terminal; Long Latch Connector; DIN Rail Mount
 /SPSpring Terminal; Panel Mount

Example: Part Number 5727.2/L for Long Latch model.

* High density version.

^a SD-M50 is only available with a 1.5A current rating.

^b SD-F50 and SD-M50 are double-sided boards and do not have component solder pads.

Interface Modules

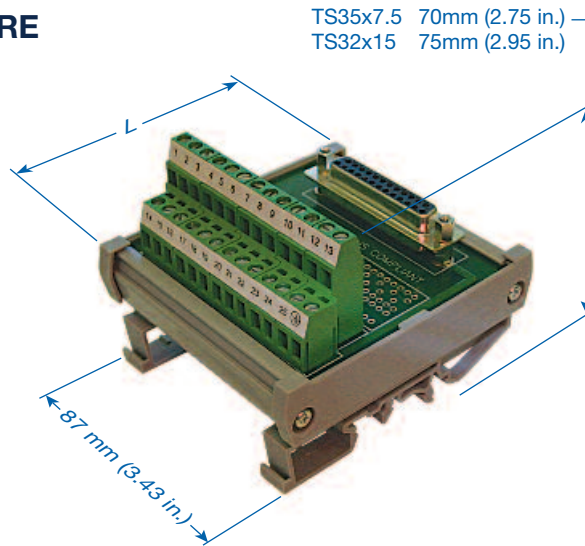
Connector to terminal block modules



INTERFACES CONNECTOR-TO-WIRE

Subminiature SD Female Module

35 or 32 mm DIN Rail Mount



Technical Information

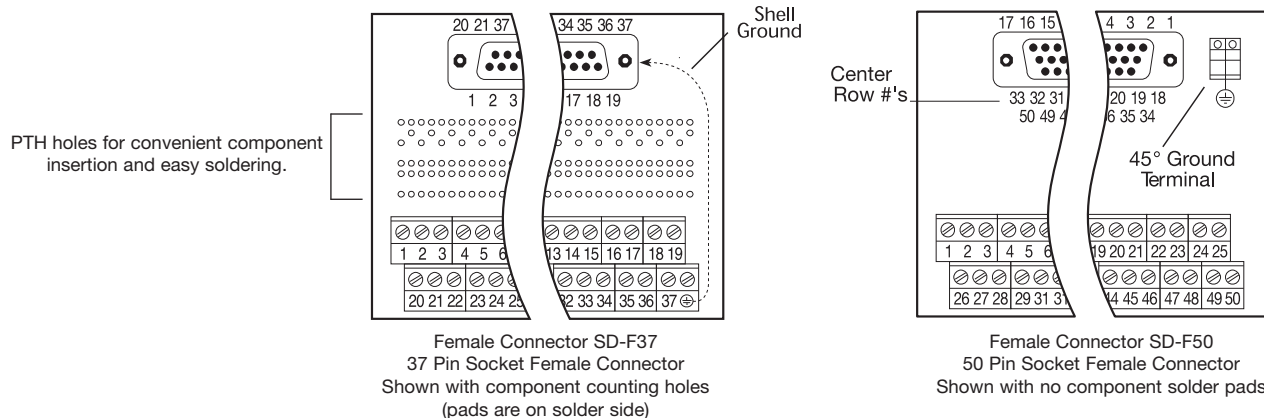
Current4 A
 Voltage250V AC
 Wire Range0.5-4 mm² / 22-12 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SCREW CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5745.2	SD-F9	9	45 (1.77)	1
5746.2	SD-F15	15	49 (1.93)	1
5746.3*	HDSD-F15	15	49 (1.93)	1
5747.2	SD-F25	25	80 (3.15)	1
5748.2	SD-F37	37	113 (4.45)	1
5749.2 ^{a,b}	SD-F50	50	136 (5.35)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5745.2/S	SD-F9	9	45 (1.77)	1
5746.2/S	SD-F15	15	49 (1.93)	1
5746.3/S*	HDSD-F15	15	49 (1.93)	1
5747.2/S	SD-F25	25	80 (3.15)	1
5748.2/S	SD-F37	37	113 (4.45)	1
5749.2/S ^{a,b}	SD-F50	50	136 (5.35)	1



Other models available; please contact Altech.

SuffixDescription
 noneScrew Terminal; DIN Rail Mount
 /SSpring Terminal; DIN Rail Mount
 /PScrew Terminal; Panel Mount

SuffixDescription
 /LScrew Terminal; Long Latch Connector; DIN Rail Mount
 /SLSpring Terminal; Long Latch Connector; DIN Rail Mount
 /SPSpring Terminal; Panel Mount

Example: Part Number 5727.2/L for Long Latch model.

* High density version.

^a SD-M50 is only available with a 1.5A current rating.

^b SD-F50 and SD-M50 are double-sided boards and do not have component solder pads.

DIODE MODULES & COMPONENT CARRIERS

INTERFACES

DM Diode Module

35 or 32mm DIN Rail Mount

Wire individually labeled diodes into existing circuits for freewheeling, DC inductive kick suppression (commutating), reverse DC polarity protection, etc. Use bussed diodes for distribution of logic Vcc or ground, or gather and decouple electrical signals for lamp testing or collective fault messages. Use as commutating diodes across inductive loads such as DC relays, solenoid valves, actuator magnets, etc. to suppress voltage surges.

Standard modules include series connection diode circuits in 1 Amp and 3 Amp versions, and diode gates with bussed anodes or cathodes.

- Screw-Cage Clamp Connections
- Special Configurations Available
- DIN Rail Mount, Panel Mount Available

INTERFACES

Component Carriers

35 or 32mm DIN Rail

Use Component Carriers to modify and/or build circuits to meet special requirements. Type CCA requires removal of the single solder-side printed circuit board from the mounting track for soldering of components. Posts or through-leads can be installed for future field connections. Contact Altech for custom installation of solder posts. Type BSM allows field additions of diodes for decoupling, line crossovers for testing or multiplying tie-in terminals for a line. Pre-installed flat, fork-and-eyelet soldering posts allow component-side mechanical and solder connections with minimum disruption to wiring and mounted devices.

- Screw-Cage Clamp Connections
- Terminal Blocks are Numbered for Easy Wire Identification
- DIN Rail Mount, Panel Mount Available

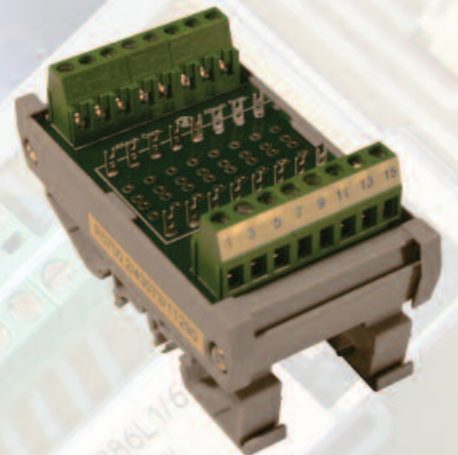
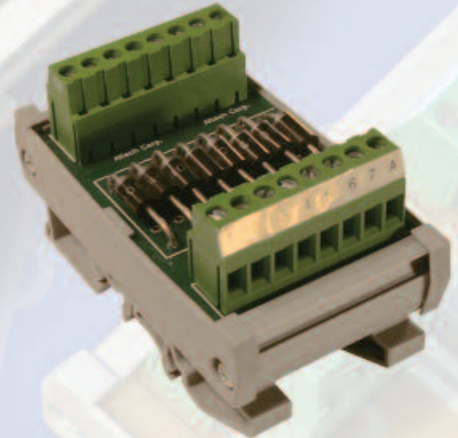
INTERFACES

Dip Socket Carrier - 3 Amp

35 or 32mm DIN Rail Mount

Enhance design capabilities with Dual In-Line Package (DIP) Socket Carriers, the most versatile socket available. Use our DIPC's for reed-relays, power relays, photo-isolated Input/Output modules, in-line switches, thin film resistors and more. The Altech DIPC is rated 3 Amp and is available in 14, 16 and 20 pin socket configurations. Each DIPC module has several component solder pads for loading circuit-building components.

- Screw-Cage Clamp Connections
- 4 to 5 Component Solder Pads Per Line
- .9mm (.035 in.) Diameter Component Mounting Holes
- DIN Rail Mount, Panel Mount Available



Interface Modules

Diode modules & component carriers



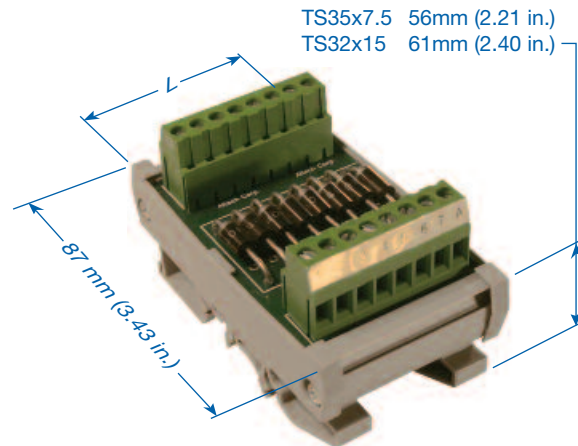
INTERFACES

DM Diode Module 35 or 32 mm DIN Rail Mount

Technical Information

Diode	Rated Current
1N4007 or equivalent	1A
1N5408 or equivalent	3A
P600M or equivalent	6A

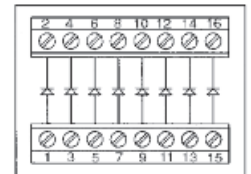
Maximum Blocking Voltage - 1000V DC
 Rated Bus Current: 10A
 (12A at 30°C (86°F) Temperature Rise)
 Wire Range0.5-4 mm²; 22-12 AWG
 Voltage250V AC
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm



SCREW CLAMP *

1 AMP

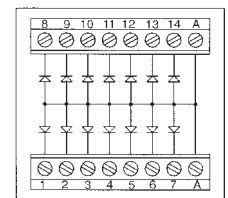
Part Number	Type	Ordering Information	No. of Diodes	Diode	Module Length (L) in mm(in.)	Std. Pk.	Figure
8971.2	DM4-S	Series Connection, 1A diodes	4	1N4007	24 (0.95)	1	A
5702.2	DM8-S	Series Connection, 1A diodes	8	1N4007	44 (1.73)	1	A
5703.2	DM12-S	Series Connection, 1A diodes	12	1N4007	64 (2.52)	1	A
8973.2	DM16-S	Series Connection, 1A diodes	16	1N4007	92 (3.62)	1	A
8974.2	DM20-S	Series Connection, 1A diodes	20	1N4007	112 (4.41)	1	A
8975.2	DM24-S	Series Connection, 1A diodes	24	1N4007	132 (5.20)	1	A
8842.2	DM6-A-S	Bussed Anodes, 1A diodes	6	1N4007	30 (1.18)	1	B
5704.2	DM14-A-S	Bussed Anodes, 1A diodes	14	1N4007	50 (1.97)	1	B
5705.2	DM22-A-S	Bussed Anodes, 1A diodes	22	1N4007	70 (2.75)	1	B
8850.2	DM6-K-S	Bussed Cathodes, 1A diodes	6	1N4007	30 (1.18)	1	C
5706.2	DM14-K-S	Bussed Cathodes, 1A diodes	14	1N4007	50 (1.97)	1	C
5707.2	DM22-K-S	Bussed Cathodes, 1A diodes	22	1N4007	70 (2.75)	1	C



DM8 - S
Figure A

3 AMP

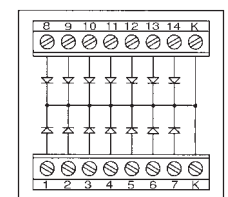
Part Number	Type	Ordering Information	No. of Diodes	Diode	Module Length (L) in mm(in.)	Std. Pk.	Figure
8971.3	DM4-S3	Series Connection, 3A diodes	4	1N5408	24 (0.95)	1	A
5702.3	DM8-S3	Series Connection, 3A diodes	8	1N5408	44 (1.73)	1	A
5703.3	DM12-S3	Series Connection, 3A diodes	12	1N5408	64 (2.52)	1	A
8973.3	DM16-S3	Series Connection, 3A diodes	16	1N5408	92 (3.62)	1	A
8974.3	DM20-S3	Series Connection, 3A diodes	20	1N5408	112 (4.41)	1	A
8975.3	DM24-S3	Series Connection, 3A diodes	24	1N5408	132 (5.20)	1	A
8842.3	DM6-A-S3	Bussed Anodes, 3A diodes	6	1N5408	30 (1.18)	1	B
5704.3	DM14-A-S3	Bussed Anodes, 3A diodes	14	1N5408	50 (1.97)	1	B
5705.3	DM22-A-S3	Bussed Anodes, 3A diodes	22	1N5408	70 (2.75)	1	B
8850.3	DM6-K-S3	Bussed Cathodes, 3A diodes	6	1N5408	30 (1.18)	1	C
5706.3	DM14-K-S3	Bussed Cathodes, 3A diodes	14	1N5408	50 (1.97)	1	C
5707.3	DM22-K-S3	Bussed Cathodes, 3A diodes	22	1N5408	70 (2.75)	1	C



DM14 - A - S
Figure B

6 AMP

Part Number	Type	Ordering Information	No. of Diodes	Diode	Module Length (L) in mm(in.)	Std. Pk.	Figure
8971.4	DM4-S6	Series Connection, 6A diodes	4	P600M	24 (0.95)	1	A
5702.4	DM8-S6	Series Connection, 6A diodes	8	P600M	44 (1.73)	1	A
5703.4	DM12-S6	Series Connection, 6A diodes	12	P600M	64 (2.52)	1	A
8973.4	DM16-S6	Series Connection, 6A diodes	16	P600M	92 (3.62)	1	A
8974.4	DM20-S6	Series Connection, 6A diodes	20	P600M	112 (4.41)	1	A
8975.4	DM24-S6	Series Connection, 6A diodes	24	P600M	132 (5.20)	1	A
8842.4	DM6-A-S6	Bussed Anodes, 6A diodes	6	P600M	30 (1.18)	1	B
5704.4	DM14-A-S6	Bussed Anodes, 6A diodes	14	P600M	50 (1.97)	1	B
5705.4	DM22-A-S6	Bussed Anodes, 6A diodes	22	P600M	70 (2.75)	1	B
8850.4	DM6-K-S6	Bussed Cathodes, 6A diodes	6	P600M	30 (1.18)	1	C
5706.4	DM14-K-S6	Bussed Cathodes, 6A diodes	14	P600M	50 (1.97)	1	C
5707.4	DM22-K-S6	Bussed Cathodes, 6A diodes	22	P600M	70 (2.75)	1	C



DM14 - K - S
Figure C

* Spring Terminal is available; add suffix S to end of part number. Example: Part Number 8971.2/S for Spring Terminal.

Interface Modules

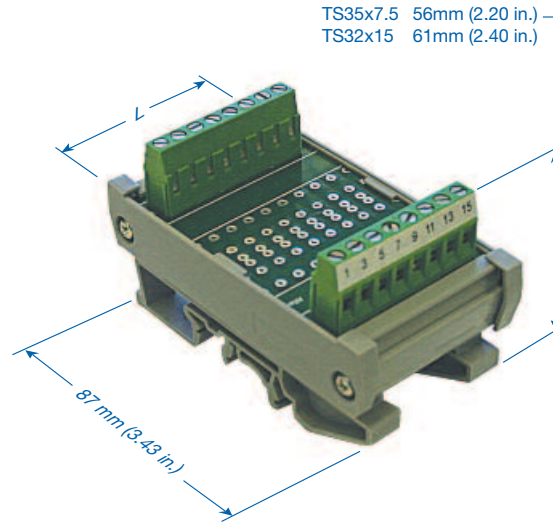
Diode modules & component carriers

INTERFACES

CCA Component Carrier 35 or 32 mm DIN Rail Mount with PTH holes

Technical Information

Current6 A (12 A Bus)
Terminal.....15 A
Voltage250V AC
Wire Range0.5-4 mm² / 22-12 AWG
Torque0.5-4 Nm / 4 lbs-in.
Stripping Length ...8 mm

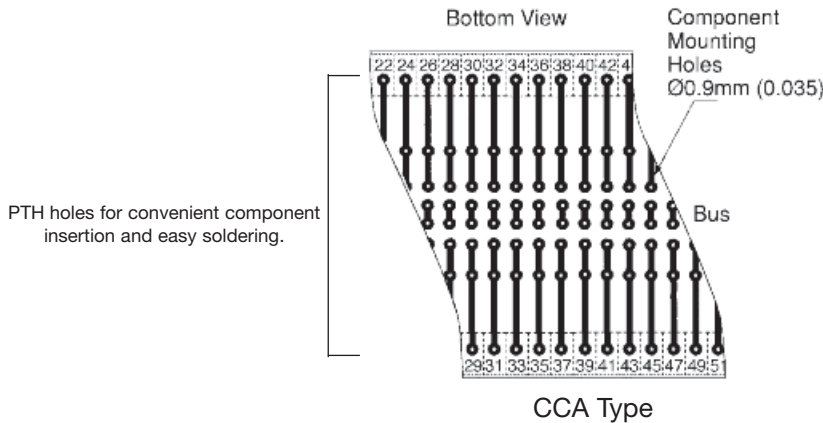


SCREW CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
8835.2	CCA4	4	24 (.87)	1
8836.2	CCA8	8	44 (1.65)	1
8837.2	CCA12	12	64 (2.44)	1
8838.2	CCA16	16	84 (3.23)	1
8839.2	CCA20	20	104 (4.02)	1
8840.2	CCA24	24	124 (4.80)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
8835.2/S	CCA4	4	24 (.87)	1
8836.2/S	CCA8	8	44 (1.65)	1
8837.2/S	CCA12	12	64 (2.44)	1
8838.2/S	CCA16	16	84 (3.23)	1
8839.2/S	CCA20	20	104 (4.02)	1
8840.2/S	CCA24	24	124 (4.80)	1



Interface Modules

Diode modules & component carriers

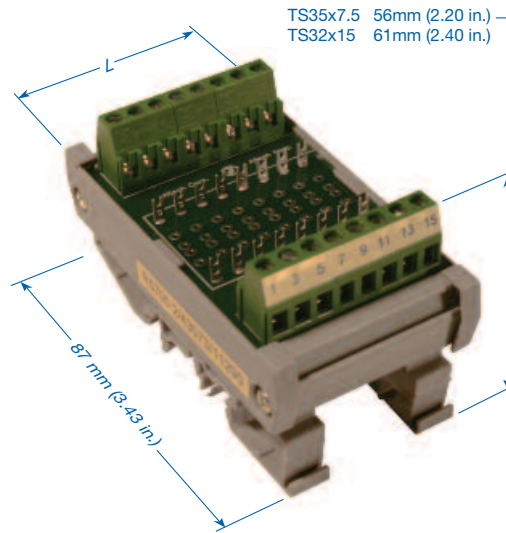


INTERFACES

BSM Component Carrier 35 or 32 mm DIN Rail Mount with solder posts

Technical Information

Current6 A (12 A Bus)
 Terminal.....15 A
 Voltage250V AC
 Wire Range0.5-4 mm² / 22-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

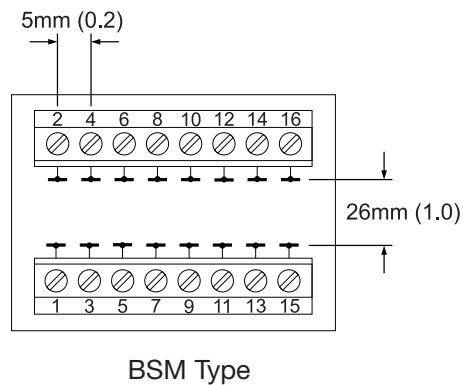
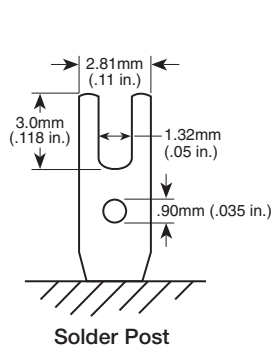


SCREW CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5700.2	BSM8-S	16	47 (1.85)	1
5701.2	BSM12-S	24	69 (2.72)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5700.2/S	BSM8-S	16	47 (1.85)	1
5701.2/S	BSM12-S	24	69 (2.72)	1



Interface Modules

Diode modules & component carriers

INTERFACES

Dip Socket Carrier - 3 Amp 35 or 32mm DIN Rail Mount

Typical Applications:

14 Pin

Magnecraft® Classes 107, 171, 172;

S-D® Series MRR-D; Hamlin® 700;

Dale® TDP14 Resistors; etc.

16 Pin

Most P&B® including T85 Hi Sens and

I/O Modules IA, OA, OD16;

Midtex® 190 Power;

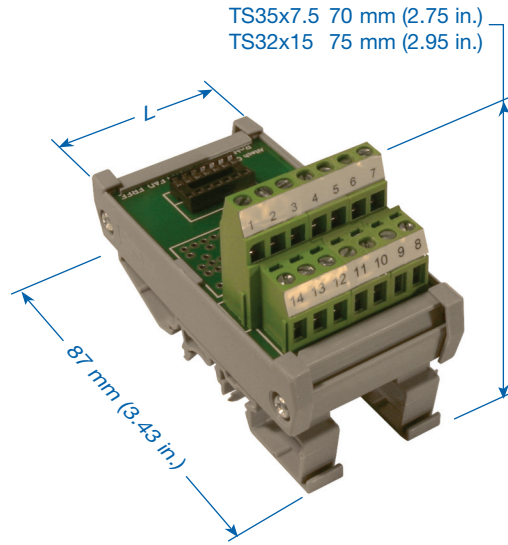
Augat® Alcoswitch® GD, AD Series, etc.

20 Pin

C&K® BD series switches;

Grayhill® 79 coded switches;

AMP® 7600 shunts; etc.



Technical Information

Current3 A^a

Voltage250V AC

Wire Range0.5-4 mm² / 22-12 AWG

Torque0.5-4 Nm / 4 lbs-in.

Stripping Length ...8 mm

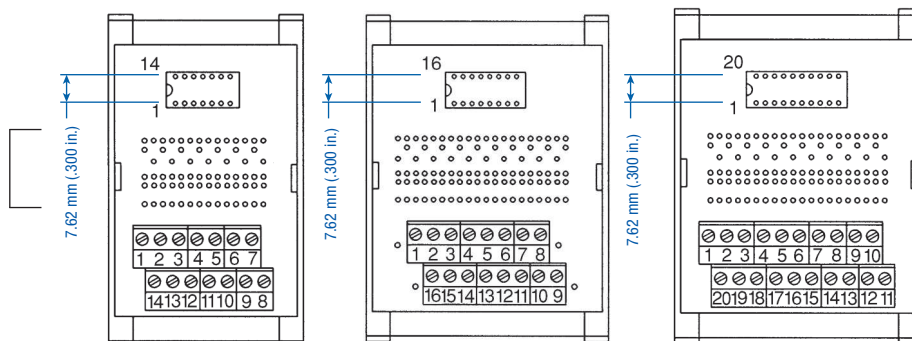
SCREW CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
8937.2	DIPC14	14	45 (1.77)	1
8938.2	DIPC16	16	68 (2.68)	1
8939.2	DIPC20	20	68 (2.68)	1

SPRING CLAMP

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
8937.2/S	DIPC14	14	45 (1.77)	1
8938.2/S	DIPC16	16	56 (2.20)	1
8939.2/S	DIPC20	20	56 (2.20)	1

PTH holes for convenient component insertion and easy soldering.



^a Current Ratings

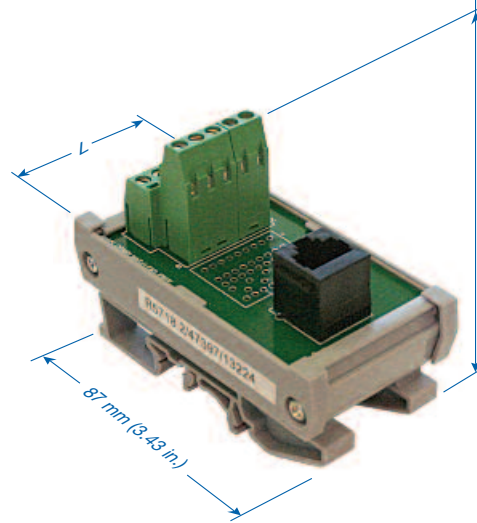
Printed Circuit Traces: 3.5A

Terminal Blocks: 15A

Dip Socket: 3A

RJ45 INTERFACES CONNECTOR-TO-WIRE 35 or 32mm DIN Rail Mount

TS35x7.5 56mm (2.20 in.)
TS32x15 61mm (2.40 in.)



Technical Information

Current1.5 A
Voltage150V AC
Wire Range0.5-4 mm² / 20-12 AWG
Torque0.5-4 Nm / 4 lbs-in.
Stripping Length ...8 mm

SCREW CLAMP - VERTICAL - Top Entry

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5718.2	RJ45	8	36 (1.42)	1
5719.2	RJ45 Shielded	8 + 2 shield	36 (1.42)	1

SCREW CLAMP - HORIZONTAL - Side Entry

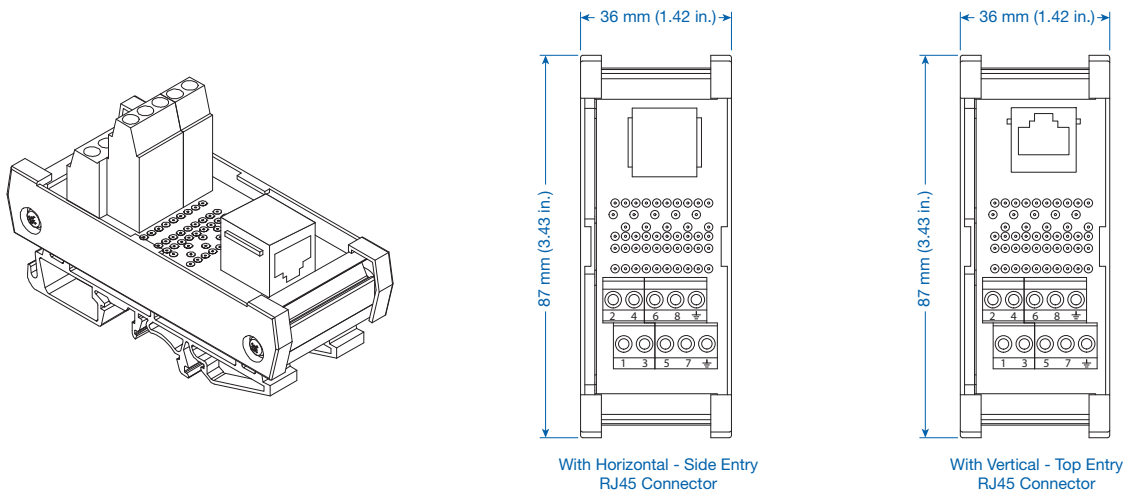
5718.3	RJ45	8	36 (1.42)	1
5719.3	RJ45 Shielded	8 + 2 shield	36 (1.42)	1

SPRING CLAMP - VERTICAL - Top Entry

Part Number	Type	No. of Poles	Module Length (L) in mm(in.)	Std. Pk.
5718.2/S	RJ45	8	36 (1.42)	1
5719.2/S	RJ45 Shielded	8 + 2 shield	36 (1.42)	1

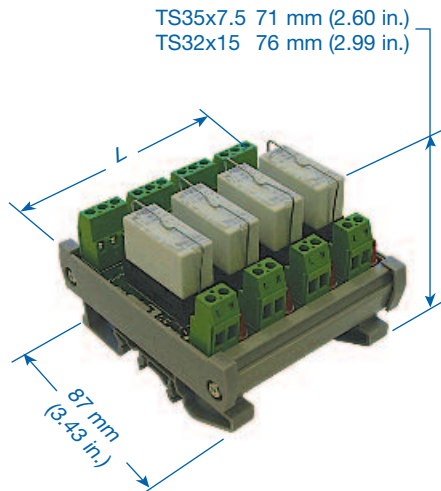
SPRING CLAMP - HORIZONTAL - Side Entry

5718.3/S	RJ45	8	36 (1.42)	1
5719.3/S	RJ45 Shielded	8 + 2 shield	36 (1.42)	1



Interfaces, Relay Modules and Carriers

Isolated SPDT, 35 or 32 DIN Rail



RC1 / RM1 SPDT (Single Pole Double Throw)

Isolated channels (no bus) allow control of each relay by a different logic system, if necessary. Mix sourcing (positive switching, Vcc on/off) and sinking (negative switching, ground on/off) on a single multi-relay module. Provide spare relay channels for future needs without committing to a specific logic power supply, and without committing coil-drive power for more than one relay at a time.

Altech Relay Modules provide high density packaging of miniature general purpose relays with Single Pole Double Throw (Form C) and Double Pole Double Throw (2 Form C) contact configurations and low current AC and DC coils. Load your own relays in our RC Relay Carrier, or order the RM Relay Module complete with relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression with DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current	12 A
Voltage (max)	250V AC / 24V DC
Wire Range	0.5-4 mm ² / 30-14 AWG
Torque	0.5-4 Nm / 4 lbs-in.
Stripping Length ...	8 mm

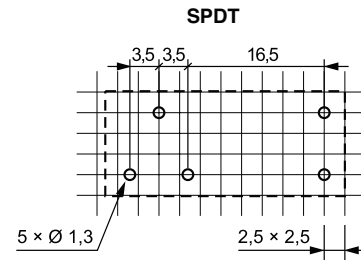
SPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
1 Channel	12V DC	8929.5	8929.2	8929.5/S	8929.2/S	21 (0.83)
	24V DC	8933.5	8933.2	8933.5/S	8933.2/S	21 (0.83)
	110V AC	8935.5	8935.2	8935.5/S	8935.2/S	21 (0.83)
	220V AC	8940.5	8940.2	8940.5/S	8940.2/S	21 (0.83)
2 Channel	12V DC	8929.6	8929.3	8929.6/S	8929.3/S	40 (1.57)
	24V DC	8933.6	8933.3	8933.6/S	8933.3/S	40 (1.57)
	110V AC	8935.6	8935.3	8935.6/S	8935.3/S	40 (1.57)
	220V AC	8940.6	8940.3	8940.6/S	8940.3/S	40 (1.57)
4 Channel	12V DC	8931.5	8931.2	8931.5/S	8931.2/S	79 (3.11)
	24V DC	8941.5	8941.2	8941.5/S	8941.2/S	79 (3.11)
	110V AC	8942.5	8942.2	8942.5/S	8942.2/S	79 (3.11)
	220V AC	8943.5	8943.2	8943.5/S	8943.2/S	79 (3.11)
8 Channel	12V DC	8931.6	8931.3	8931.6/S	8931.3/S	157 (6.18)
	24V DC	8941.6	8941.3	8941.6/S	8941.3/S	157 (6.18)
	110V AC	8942.6	8942.3	8942.6/S	8942.3/S	157 (6.18)
	220V AC	8943.6	8943.3	8943.6/S	8943.3/S	157 (6.18)
16 Channel	12V DC	8932.5	8932.2	8932.5/S	8932.2/S	311 (12.24)
	24V DC	8944.5	8944.2	8944.5/S	8944.2/S	311 (12.24)
	110V AC	8946.5	8946.2	8946.5/S	8946.2/S	311 (12.24)
	220V AC	8948.5	8948.2	8948.5/S	8948.2/S	311 (12.24)

CONTACT SPECIFICATIONS*

SPDT Composite Rating	12A
Relay Socket	12A
Terminal Block	15A
PCB Trace for Contact Circuit	
at 30°C (86°F) temperature rise NC	12A
Common and NO	16A
PCB Trace for Coil Circuit	
at 30°C (86°F) temperature rise	6A
Relay Contact Material	AgNi
Rated load (capacity)	12A at 250VAC / 24VDC
Min. switching voltage	5 V
Min. switching current	5mA
Min. breaking capacity	0.3W

RELAY PINOUT*

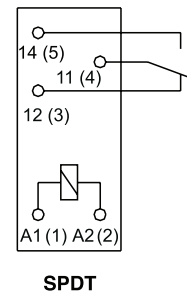


COIL SPECIFICATIONS*

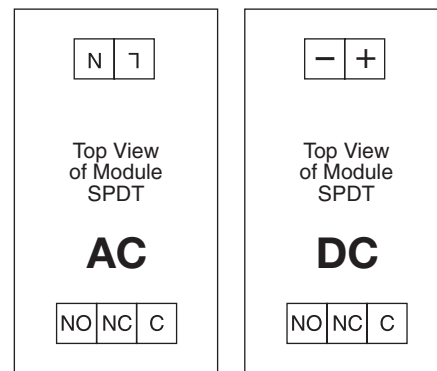
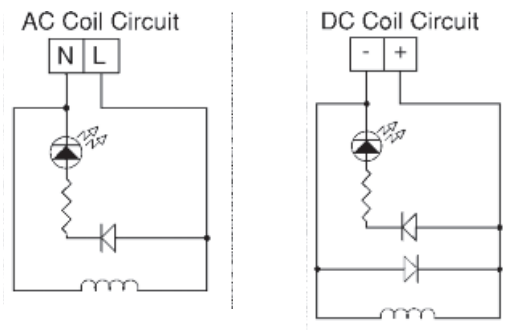
Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

CONTACT CIRCUITS*



COIL CIRCUITS



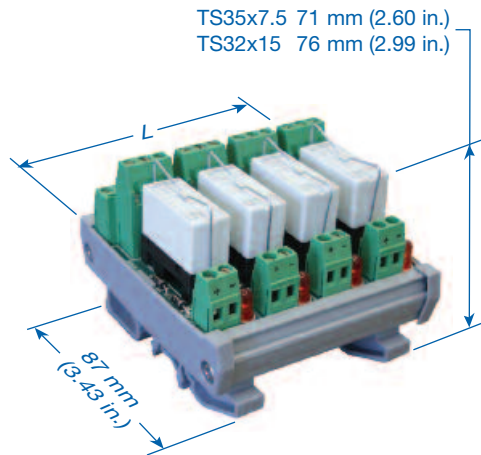
SPDT

* For more information please see page 76 (Relay RM87)

Interfaces, Relay Modules and Carriers

Isolated DPDT, 35 or 32 DIN Rail

RC2 / RM2 (Double Pole Double Throw)



Isolated channels (no bus) allow control of each relay by a different logic system, if necessary. Mix sourcing (positive switching, Vcc on/off) and sinking (negative switching, ground on/off) on a single multi-relay module. Provide spare relay channels for future needs without committing to a specific logic power supply, and without committing coil-drive power for more than one relay at a time.

Altech Relay Modules provide high density packaging of miniature general purpose relays with Single Pole Double Throw (Form C) and Double Pole Double Throw (2 Form C) contact configurations and low current AC and DC coils. Load your own relays in our RC Relay Carrier, or order the RM Relay Module complete with relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression with DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current	8 A
Voltage (max)	250V AC / 24V DC
Wire Range	0.5-4 mm ² / 30-14 AWG
Torque	0.5-4 Nm / 4 lbs-in.
Stripping Length ...	8 mm

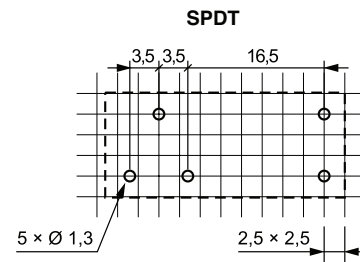
DPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
1 Channel	12V DC	8945.5	8945.2	8945.5/S	8945.2/S	21 (0.83)
	24V DC	8951.5	8951.2	8951.5/S	8951.2/S	21 (0.83)
	110V AC	8953.5	8953.2	8953.5/S	8953.2/S	21 (0.83)
	220V AC	8954.5	8954.2	8954.5/S	8954.2/S	21 (0.83)
2 Channel	12V DC	8949.6	8949.3	8949.6/S	8949.3/S	40 (1.57)
	24V DC	8951.6	8951.3	8951.6/S	8951.3/S	40 (1.57)
	110V AC	8953.6	8953.3	8953.6/S	8953.3/S	40 (1.57)
	220V AC	8954.6	8954.3	8954.6/S	8954.3/S	40 (1.57)
4 Channel	12V DC	8955.5	8955.2	8955.5/S	8955.2/S	79 (3.11)
	24V DC	8956.5	8956.2	8956.5/S	8956.2/S	79 (3.11)
	110V AC	8957.5	8957.2	8957.5/S	8957.2/S	79 (3.11)
	220V AC	8959.5	8959.2	8959.5/S	8959.2/S	79 (3.11)
8 Channel	12V DC	8955.6	8955.3	8955.6/S	8955.3/S	157 (6.18)
	24V DC	8956.6	8956.3	8956.6/S	8956.3/S	157 (6.18)
	110V AC	8957.6	8957.3	8957.6/S	8957.3/S	157 (6.18)
	220V AC	8959.6	8959.3	8959.6/S	8959.3/S	157 (6.18)
16 Channel	12V DC	8963.5	8963.2	8963.5/S	8963.2/S	311 (12.24)
	24V DC	8972.5	8972.2	8972.5/S	8972.2/S	311 (12.24)
	110V AC	8995.5	8995.2	8995.5/S	8995.2/S	311 (12.24)
	220V AC	8999.5	8999.2	8999.5/S	8999.2/S	311 (12.24)

CONTACT SPECIFICATIONS*

DPDT Rating	8A
Relay Socket.....	8A
Terminal Block.....	15A
PCB Trace for Contact Circuit at 30°C (86°F) temperature rise NC.....	10A
PCB Trace for Coil Circuit at 30°C (86°F) temperature rise	2A
Relay Contact Material.....	AgNi
Rated load (capacity)	8A at 250VAC / 24VDC
Min. switching voltage	5 V
Min. switching current	5mA
Min. breaking capacity.....	0.3W

RELAY PINOUT*

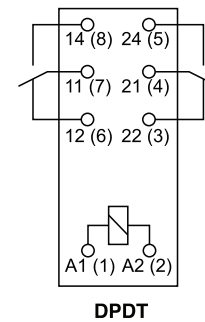


COIL SPECIFICATIONS*

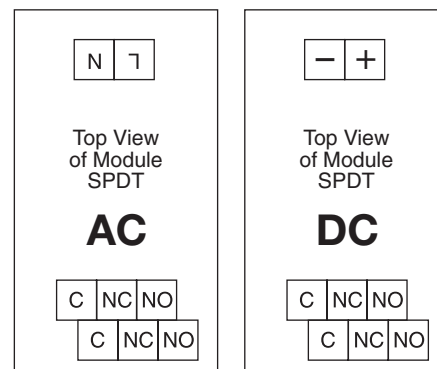
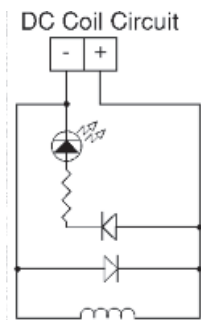
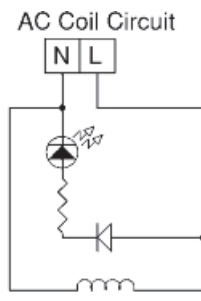
Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

CONTACT CIRCUITS*



COIL CIRCUITS



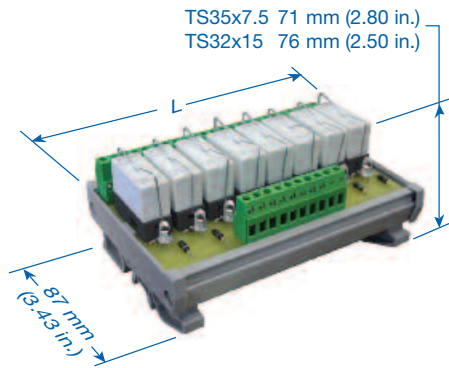
DPDT

* For more information please see page 76 (Relay RM84)

Interfaces, Relay Modules and Carriers

Bussed SPDT, 35 or 32 DIN Rail

RC1 / RM1 (Single Pole Double Throw)



Altech Bussed Relay Modules provide high density packaging of miniature general purpose relays with minimal hook-up wiring. Select from bussed DC Positive (DC Negative switching), bussed DC Negative (DC Positive switching), or bussed AC neutral.

Ideal for traditional mechanical relay input/output array between a single logic system and peripheral devices, or between logic systems in a network as well as their peripheral and field devices.

Load your own relays in our RCB Relay Carrier, or order the RMB Relay Module complete with 8 or 16 relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current12 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

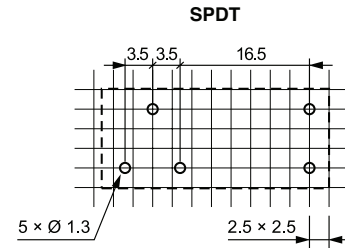
SPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
8 Channel, Bussed DC+	12V DC (E)	8912.5	8912.2	8912.5/S	8912.2/S	125 (4.92)
	24V DC (G)	5494.5	5494.2	5494.5/S	5494.2/S	125 (4.92)
8 Channel, Bussed DC-	12V DC (E)	8912.6	8912.3	8912.6/S	8912.3/S	125 (4.92)
	24V DC (G)	5492.5	5492.2	5492.5/S	5492.2/S	125 (4.92)
8 Channel, Bussed AC (N)	110V AC (U)	5502.5	5502.2	5502.5/S	5502.2/S	125 (4.92)
	220V AC (X)	8913.6	8913.3	8913.6/S	8913.3/S	125 (4.92)
16 Channel, Bussed DC+	12V DC (E)	8914.5	8914.2	8914.5/S	8914.2/S	248 (9.76)
	24V DC (G)	5508.5	5508.2	5508.5/S	5508.2/S	248 (9.76)
16 Channel, Bussed DC-	12V DC (E)	8921.5	8921.2	8921.5/S	8921.2/S	248 (9.76)
	24V DC (G)	5506.5	5506.2	5506.5/S	5506.2/S	248 (9.76)
16 Channel, Bussed AC(N)	110V AC (U)	5514.5	5514.2	5514.5/S	5514.2/S	248 (9.76)
	220V AC (X)	5514.6	5514.3	5514.6/S	5514.3/S	248 (9.76)

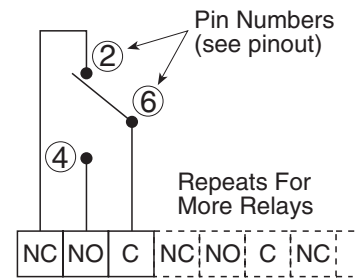
CONTACT SPECIFICATIONS*

SPDT Composite Rating	12A
Relay Socket.....	12A
Terminal Block	15A
PCB Trace for Contact Circuit	
at 30°C (86°F) temperature rise NC.....	12A
PCB Trace for Coil Circuit	
at 30°C (86°F) temperature rise	4A
PCB Trace for Bus	
at 30°C (86°F) temperature rise	16A
Relay Contact Material	AgNi
Rated load (capacity)	12A at 250VAC / 24VDC
Min. switching voltage	5 V
Min. switching current	5mA
Min. breaking capacity.....	0.3W

RELAY PINOUT*



CONTACT CIRCUITS*

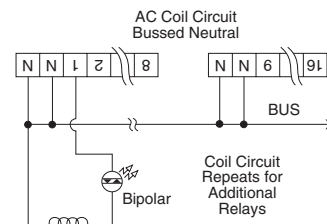
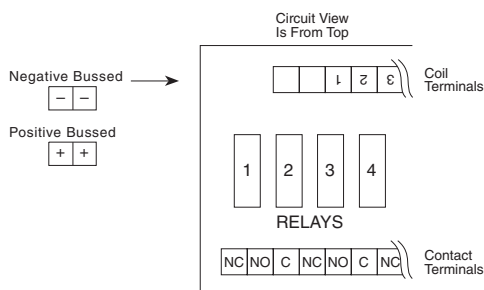
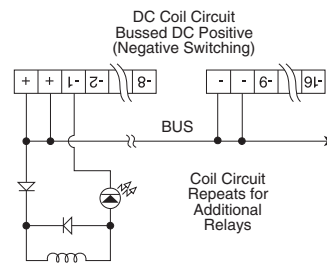
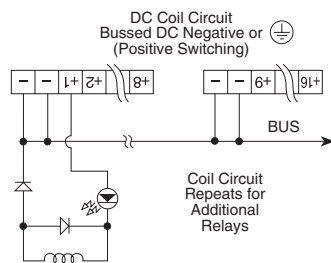


COIL SPECIFICATIONS*

Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

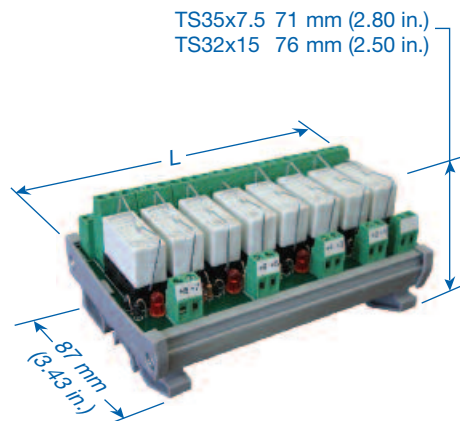
COIL CIRCUITS



* For more information please see page 76 (Relay RM87)

Interfaces, Relay Modules and Carriers

Bussed DPDT, 35 or 32 DIN Rail



RC2 / RM2 (Double Pole Double Throw)

Altech Bussed Relay Modules provide high density packaging of miniature general purpose relays with minimal hook-up wiring. Select from bussed DC Positive (DC Negative switching), bussed DC Negative (DC Positive switching), or bussed AC neutral.

Ideal for traditional mechanical relay input/output array between a single logic system and peripheral devices, or between logic systems in a network as well as their peripheral and field devices.

Load your own relays in our RCB Relay Carrier, or order the RMB Relay Module complete with 8 or 16 relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current8 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

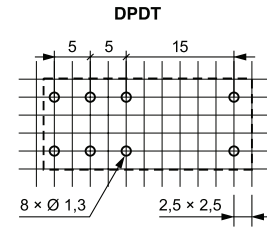
DPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
8 Channel, Bussed DC+	12V DC (E)	8923.5	8923.2	8923.5/S	8923.2/S	125 (4.92)
	24V DC (G)	8924.5	8924.2	8924.5/S	8924.2/S	125 (4.92)
8 Channel, Bussed DC-	12V DC (E)	8923.6	8923.3	8923.6/S	8923.3/S	125 (4.92)
	24V DC (G)	8924.6	8924.4	8924.6/S	8924.4/S	125 (4.92)
8 Channel, Bussed AC (N)	110V AC (U)	8925.5	8925.2	8925.5/S	8925.2/S	125 (4.92)
	220V AC (X)	8925.6	8925.3	8925.6/S	8925.3/S	125 (4.92)
16 Channel, Bussed DC+	12V DC (E)	8926.5	8926.2	8926.5/S	8926.2/S	248 (9.76)
	24V DC (G)	8926.6	8926.3	8926.6/S	8926.3/S	248 (9.76)
16 Channel, Bussed DC-	12V DC (E)	8927.5	8927.2	8927.5/S	8927.2/S	248 (9.76)
	24V DC (G)	8927.6	8927.3	8927.6/S	8927.3/S	248 (9.76)
16 Channel, Bussed AC(N)	110V AC (U)	8928.5	8928.2	8928.5/S	8928.2/S	248 (9.76)
	220V AC (X)	8928.6	8928.3	8928.6/S	8928.3/S	248 (9.76)

CONTACT SPECIFICATIONS*

DPDT Rating8A
 Relay Socket.....8A
 Terminal Block.....15A
 PCB Trace for Contact Circuit
 at 30°C (86°F) temperature rise NC.....8A
 PCB Trace for Coil Circuit
 at 30°C (86°F) temperature rise2A
 PCB Trace for Bus
 at 30°C (86°F) temperature rise16A
 Relay Contact Material.....AgNi
 Rated load (capacity)8A at 250VAC / 24VDC
 Min. switching voltage5 V
 Min. switching current5mA
 Min. breaking capacity.....0.3W

RELAY PINOUT*

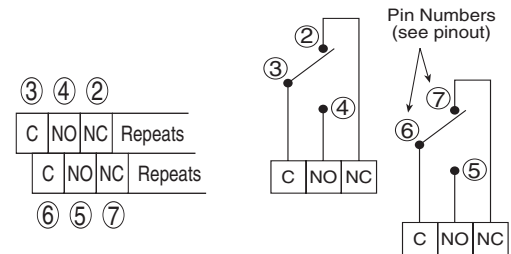


COIL SPECIFICATIONS*

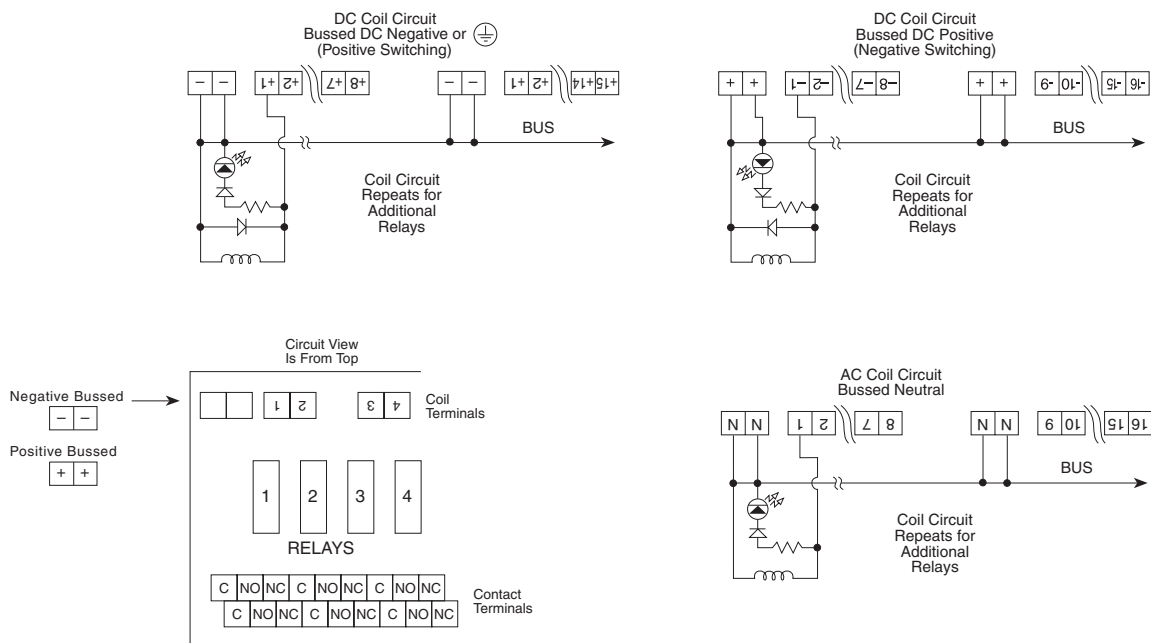
Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

CONTACT CIRCUITS*



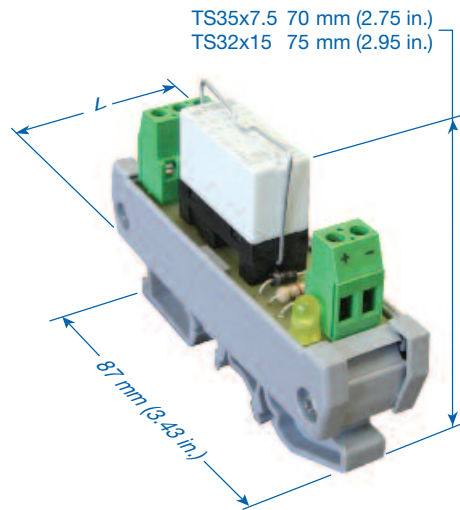
COIL CIRCUITS



* For more information please see page 76 (Relay RM84)

Interfaces, High Current Isolated

Isolated Channels - 16 Amp, 35 or 32 DIN Rail



RMH1 - 1 Channel (Single Pole Double Throw)

A true high-current rating in a DIN Rail mount miniature relay module. The miniature relays used in the Altech RMH have a SPDT (Form C) 16 Amp continuous current rating, developed from dual 8 Amp contacts that are internally connected in parallel. The relay socket is rated dual 8 Amp. Printed circuit traces are balanced, rated 16 Amp and connect to Altech terminal blocks UL rated 15A/300V.

Typical relay specifications combined with other module component ratings give module ratings suitable for many control applications.

- Screw-Cage Clamp Connection
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coils
- Industry Standard Relays*
- DIN Rail Mount, Panel Mount Available

Technical Information

Current16 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SPDT DC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
1 Channel	5V DC	8905.2	8905.2/S	Yellow	21 (0.83)
1 Channel	6V DC	8906.2	8906.2/S	Green	21 (0.83)
1 Channel	12V DC	8907.2	8907.2/S	Red	21 (0.83)
1 Channel	24V DC	5800.2	5800.2/S	Yellow	21 (0.83)
1 Channel	48V DC	5802.2	5802.2/S	Green	21 (0.83)
1 Channel	60V DC	8908.2	8908.2/S	Red	21 (0.83)
1 Channel	110V DC	5803.2	5803.2/S	Red	21 (0.83)

SPDT AC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
1 Channel	6V AC	8909.2	8909.2/S	Green	21 (0.83)
1 Channel	12V AC	8910.2	8910.2/S	Red	21 (0.83)
1 Channel	24V AC	5801.2	5801.2/S	Red	21 (0.83)
1 Channel	50V AC	8911.2	8911.2/S	Red	21 (0.83)
1 Channel	110V AC	5804.2	5804.2/S	Yellow	21 (0.83)
1 Channel	220V AC	5805.2	5805.2/S	Green	21 (0.83)
1 Channel	240V AC	5806.2	5806.2/S	Red	21 (0.83)

GENERAL RELAY SPECIFICATIONS*

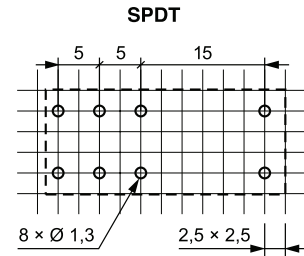
Mechanical Life (cycles).....> 3×10^7
 Max operating frequency
 • at rated load.....600 cycles/hour
 • no load.....72000 cycles/hour
 Operating / release time7 ms/ 3 ms

COIL SPECIFICATIONS*

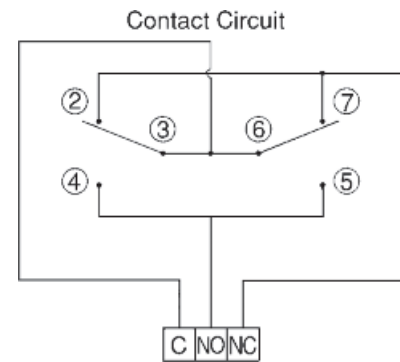
Contact materialAgNi
 Rated load (capacity)16A at 250V AC / 24 V DC
 Max. breaking capacity.....4000 VA
 Min. breaking capacity.....0.3 W
 Electrical life (resistive AC1).....> 0.7×10^5

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
5.0	3.5	12.7	96.0	60.0	$\pm 10 \%$
6.0	4.2	15.3	80.0	90.0	$\pm 10 \%$
12.0	8.4	30.6	40.0	360.0	$\pm 10 \%$
24.0	16.8	61.2	20.0	1,440.0	$\pm 10 \%$
48.0	33.6	122.4	10.0	5,700.0	$\pm 10 \%$
60.0	42.0	153.0	8.0	7,500.0	$\pm 10 \%$
110.0	77.0	280.0	4.4	25,200.0	$\pm 10 \%$

RELAY PINOUT*

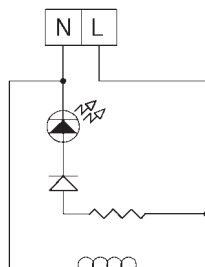


CONTACT CIRCUITS*

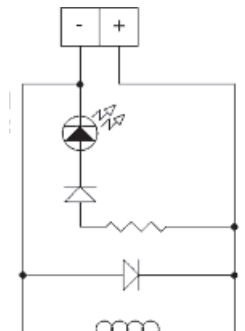


COIL CIRCUITS

AC COIL CIRCUIT



DC COIL CIRCUIT



* For more information please see page 76 (Relay RM85)