

CHART I International Protection (IP) Ratings to IEC 529

Protection Modes to EN 60529 DIN VDE 0470 Part 1		Second Digit – Degree of Water Protection									
		IP X0 No Protection	IP X1 Protection against dripping water falling vertically	IP X2 Protection against dripping water even when tilted 15° vertically	IP X3 Protection against dripping water even when tilted 60°	IP X4 Protection against splashing water from any direction	IP X5 Protection against water jets from any direction	IP X6 Protection against heavy seas from any direction	IP X7 Protection against effects of immersion	IP X8 Protection against submersion	
First Digit	Person touching	Protection against penetration of foreign bodies									
	IP 0X	No protection	No protection	IP 00							
IP 1X	Protection against touching with the hand	Protection against large solid bodies > 50mm Ø	IP 10	IP 11	IP 12						
IP 2X	Protection against touching with the finger	Protect. against med., solid bodies > 12.5 mm Ø	IP 20	IP 21	IP 22	IP 23					
IP 3X	Protection against touching with tools, wires, etc., > 2.5 mm Ø	Protection against small, solid bodies > 2.5 mm Ø	IP 30	IP 31	IP 32	IP 33	IP 34				
IP 4X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against small, solid bodies > 1 mm Ø	IP 40	IP 41	IP 42	IP 43	IP 44				
IP 5X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against internal dust accumulation	IP 50				IP 54	IP 55			
IP 6X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against all dust penetration	IP 60					IP 65	IP 66	IP 67	IP 68

In some countries a third digit is added. It gives information about the mechanical properties of the equipment. This designation has not yet been standardized according to current DIN and IEC regulations. Devices in this catalogue correspond to digit IP .7.

CHART II NEMA / IP Cross Reference

The chart below provides a cross-reference from NEMA to International Protection (IP) Ratings. This cross-reference is an approximation based on the most current information available. It is not sanctioned by NEMA, IEC, or any other regulatory body. This chart should be used only as a guideline.

IEC 529 Protection Ratings	NEMA Ratings									
	1	2	3	3R	4	4X	5	6	12	13
IP 00	↓									
IP 10		↓								
IP 11										
IP 20										
IP 21										
IP 22										
IP 23										
IP 30										
IP 31				↓						
IP 32										
IP 33										
IP 40										
IP 41										
IP 42										
IP 43										
IP 50										
IP 51										
IP 52										
IP 53										
IP 54										↓
IP 55										
IP 56										
IP 60										
IP 61										
IP 62										
IP 63			↓							
IP 64										
IP 65					↓	↓				
IP 66										
IP 67								↓	↓	
IP 68										

Properties of used Materials							
Material	Product	Temperature Resistance			Flammability Rating acc. to		Halogen Content
		Short-Term	Constant	Min. Temp.	UL 94	VDE 0471	
Polystyrene, flame resistant, impact resistant	TK//AK/AKL and Abox series	80° C 176° F	70° C 158° F	-40° C -40° F	V - 2	960° C 1760° F	none
Polycarbonate, glass fibre reinforced, flame-impact resistant	TK/AK-i/AKL/EK and Abox-i series	130° C 266° F	120° C 248° F	-35° C -31° F	V - 2 (5V) ¹	960° C 1760° F	none
Polycarbonate, transparent	TK/EK/AK/AKL hinged door and transparent lid	130° C 266° F	120° C 248° F	-35° C -31° F	V - 2 (5V) ¹	850° C 1562° F	none
Thermoplastic Elastomer	Membrane plugs, membranes Abox 025/040	110° C 230° F	80° C 176° F	-30° C -22° F	HB	750° C 1382° F	none
Polyethylene, flame resistant	Entry Spouts	100° C 212° F	70° C 158° F	-40° C -40° F	HB	960° C 1760° F	none
Aluminum Al 12Si	AL series	130° C 266° F	100° C 212° F	-40° C -40° F	--		none
Polypropylene, flame resistant	HP series	120° C 248° F	100° C 212° F	-30° C -22° F	V-2	960° C 1760° F	none*

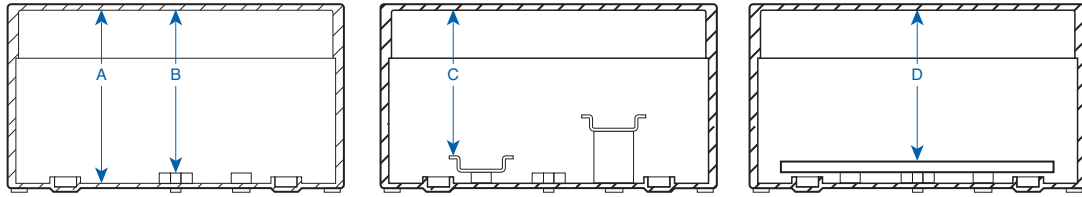
All data given according to specifications of manufacturers; no guarantee from Altech/Spelsberg can be claimed.
¹ Approved for TK enclosures.
 * The basic material is halogen-free. Small amounts of halogen are contained in the flame proof finish of which approximately 6% is added to the materials.

Maximum permissible number of terminals and conductors to DIN 57606/VDE 0606									
The table below indicates the numbers of terminals and conductors which can be used in the respective Altech/Spelsberg junction box:									
Box Size Rated Cross-Section mm ²	Minimum Box Volume cm ³	Applies to Altech/Spelsberg Box Models	Number of Terminals and Conductors	Conductor cross section mm ²					
				1.5	2.5	4	6	10	16
2.5 mm ²	115 cm ³	HP 70/80 Abox 025	Terminal Conductor	6 20	5 15				
4 mm ²	200 cm ³	HP 90 Abox 040	Terminal Conductor	8 24	6 20	5 15			
6 mm ²	300 cm ³	HP 100 Abox 060	Terminal Conductor	10 30	8 24	6 20	5 15		
10 mm ²	500 cm ³	Abox 100	Terminal Conductor	12 36	10 30	8 24	6 20	5 15	
16 mm ²	825 cm ³	Abox 160	Terminal Conductor	18 54	15 45	12 36	8 24	6 20	5 15

Chemical Resistance Materials														
Material	Product	water	weak acid	strong acid	weak alkali	strong alkali	alcohol	petrol	benzene	mineral oil	diesel	vegetable fat	animal fat	Ammonia
Polystyrene, flame resistant, impact resistant	TK/AK/AKL and Abox series	●	●	◐	●	●	●	⊗	⊗	◐	⊗	◐	◐	●
Polycarbonate, glass fibre reinforced, flame-, impact resistant	TK/AK-i/AKL/EK and Abox-i series	●	●	●	⊗	⊗	●	●	⊗	●	◐	●	●	⊗
Polycarbonate, transparent	TK/EK/AK/AKL hinged door and transparent lid	●	●	●	⊗	⊗	◐	◐	⊗	●	◐	●	●	⊗
Thermoplastic Elastomer	Membrane plug, membranes Abox 025/040	●	●	◐	●	◐	●	◐	◐	◐	◐	●	●	◐
Polyethylene, flame resistant	Entry Spouts	●	●	●	●	●	●	◐	⊗	◐	◐	●	●	●
Polyurethane	Lid seals for all models	●	◐	◐	◐	◐	◐	◐	◐	●	◐	●	●	◐
Aluminum Al 12 Si	AL series	●	●	◐	●	●	◐	●	⊗	●	●	◐	◐	●
Polypropylene, flame resistant	HP series	●	●	◐	●	◐	●	◐	◐	●	◐	●	●	●
		= resistant			= limited resistance			= non-resistant						

UV - Resistance									
<p>The degree of weather resistance given by the polycarbonate enclosures used is generally adequate. The enclosures have been tested under practical conditions in tropical regions for many years. If transparent lids are used, it is recommended to protect them against the direct effects of sun radiation.</p> <p>The American UL testing laboratories have approved several types of the PC series. A part of this examination is the test for UV resistance (UL 746 C).</p> <p>The weather proof test according to DIN 53 387 / 1000 hours was conducted at the "National Materials Testing Authority" in Dortmund.</p>									
Materials tested:	<table border="0"> <tr> <td>Polyethylene gray + black</td> <td>Polycarbonate, 15% GV, gray</td> </tr> <tr> <td>Polypropylene gray</td> <td>Polycarbonate, transparent</td> </tr> <tr> <td>TPE gray</td> <td>Polycarbonate, smoky topaz</td> </tr> <tr> <td>FS 131 gray</td> <td></td> </tr> </table>	Polyethylene gray + black	Polycarbonate, 15% GV, gray	Polypropylene gray	Polycarbonate, transparent	TPE gray	Polycarbonate, smoky topaz	FS 131 gray	
Polyethylene gray + black	Polycarbonate, 15% GV, gray								
Polypropylene gray	Polycarbonate, transparent								
TPE gray	Polycarbonate, smoky topaz								
FS 131 gray									
Note:	The test reports can be obtained from us free of charge.								
Shock-Testing by the Federal Office for Civil Defense									
<p>For installation in air raid shelters in accordance with standard test class RK 0.63/6.3, safety degree A. Devices up to an allowable weight of 2 kg are not subject to compulsory testing.</p> <p>Of the larger enclosures, the following types have been tested and approved:</p> <ul style="list-style-type: none"> • TK 2518, TK 3625 as empty enclosure • RK 2518, RK 3625 as serial terminal enclosure • EK 12, EK 24 as distribution box • AK 12, AK 24 as distribution board <p style="text-align: right;">(Application certificate 023/95)</p>									
Approval through «Bureau Veritas»									
<p>The following program series have been approved (Nr. 2661/2869/BO/OD) and are consequently suitable for installation in ships and shipyards:</p> <ul style="list-style-type: none"> • EK- Series distribution boards • Nautic- Series junction boxes • RK- Series terminal boxes • TK- Series empty enclosures 									
Polyurethane - sealing material									
<p>All enclosure types utilize a seal composed of a dual-component, specialty mixture. The seals are halogen-free, chemically resistant (see summary on pg. 120) and especially temperature resistant. The seals are inserted by robots, are exactly evenly distributed, and have a solid grip on the upper section of the enclosure. Consequently, a secure and safe respect reliable function of the seals is guaranteed.</p>									

Clearance Installation Heights for Spelsberg Enclosures



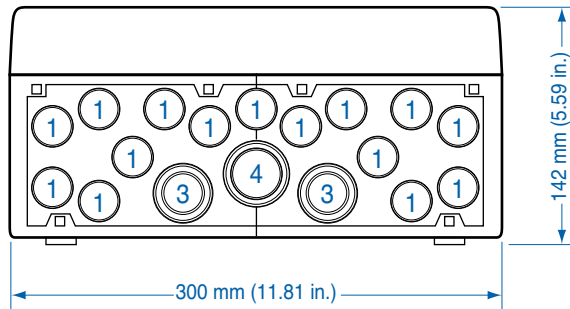
A) from base bottom
 B) from standoffs in base
 C) from top of mounting rail NS 35 (mounted on base standoffs)
 D) from top of mounting plate
 [all dimensions in mm (in)]

Series	A	B	C	D
HP- Series				
HP 70/80	38.5 (1.52)	31.5 (1.24)		
HP 90	40 (1.57)	33 (1.30)		
HP 100	52.5 (2.07)	46.5 (1.83)		
Abox/Abox-i - Junction boxes				
Abox/Abox-i 025	42 (1.65)	36 (1.42)		
Abox/Abox-i 040	45 (1.77)	39 (1.54)	34 [TS 15] (1.34)	
Abox/Abox-i 0	49 (1.93)	49 (1.93)	41.5 (1.63)	38.5 (1.52)
Abox/Abox-i 100	60 (2.36)	60 (2.36)	52.5 (2.07)	49.5 (1.95)
Abox/Abox-i 160	71 (2.80)	71 (2.80)	63.5 (2.50)	60.5 (2.38)
Abox/Abox-i 350	92 (3.62)	92 (3.62)	84.5 (3.33)	81.5 (3.21)
AK/AKi - Distribution Boxes				
AK/AKi03	85 (3.35)	79 (3.11)	71.5 (2.81)	
AK/AKi05 to 24	111 (4.37)	105 (4.13)	98.5 (3.88)	
AK/AKi14 to 70	117.5 (4.63)	114 (4.49)	96 (3.78)	
AKL/AKi - Enclosures				
AKL/AKi 1 to 4	117.5 (4.63)	114 (4.49)	106.5 (4.19)	110 (4.33)
AKL/AKi 2-h to 4-h	194.5 (7.66)	191 (7.52)	183.5 (7.22)	187 (7.36)
EK- Distribution boxes				
EK 002	69 (2.76)	69 (2.76)	63.5 (2.50)	
EK 004/008/012/024	103 (4.06)	97 (3.82)	89.5 (3.52)	
TK- Enclosures - low cover				
TK 77/97/99/1309/1809	45 (1.77)	45 (1.77)	40 (1.57)	36 (1.42)
TK 1111	53 (2.09)	53 (2.09)	45.5 (1.79)	44 (1.73)
TK 1313	63 (2.48)	63 (2.48)	55.5 (2.19)	54 (2.13)
TK 1811/1818/2518	81 (3.19)	75 (2.95)	67.5 (2.66)	72 (2.83)
TK 3625	103 (4.06)	97 (3.82)	89.5 (3.41)	94 (3.70)
TK- Enclosures - high cover				
TK 77/97/99/1309/1809	69 (2.72)	69 (2.72)	64.0 (2.52)	60 (2.36)
TK 1111	77 (3.03)	77 (3.03)	69.5 (2.74)	68 (2.68)
TK 1313	87 (3.43)	87 (3.43)	79.5 (3.13)	78 (3.07)
TK 1811/1818/2518	103 (4.06)	97 (3.82)	89.5 (3.52)	94 (3.70)
TK 3625	156 (6.14)	150 (5.90)	142.5 (5.61)	147 (5.79)
TK- Enclosures - extra high cover				
TK 1811/1818/2518 – 16	156 (6.14)	150 (5.90)	142.5 (5.61)	147.5 (5.81)

AK and AKL Knockout Details

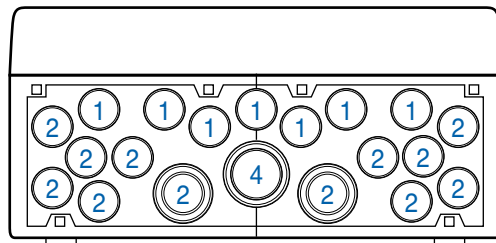
End View
 AK - Bottom Only
 AKL - Top and Bottom

End View
 AK / AKL



End View
 AK - Top Only

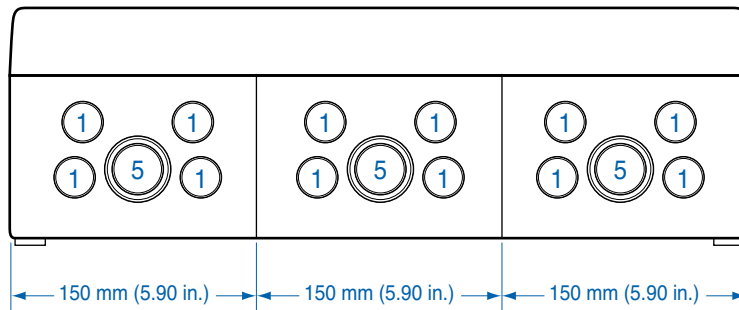
End View
 AK - Top Only



Side View

AK
 AKL

Side View
 AKL / AKL



- ① = M20 (Knockout)
- ② = M20 (Installed Double Membrane Seal)
- ③ = M20/M25 (Knockout)
- ④ = M32/M40 (Knockout)
- ⑤ = M25/M32 (Knockout)

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STANDARD TERMS AND CONDITIONS OF SALE

TITLE - Title to the products of ALTECH shall remain with ALTECH until payment is made in full by Customer. Such reservation of title is for the purpose of securing the purchase price and shall not relieve Customer of the duty to inspect the products upon receipt, to notify ALTECH of any deficiencies or defects, and to exercise due care in the use, installation, operation, and maintenance of the products when on the premise of the Customer or under the control of the Customer. Notwithstanding any reservation of title by ALTECH, risk of loss shall pass to customer at any time of shipment.

SHIPMENT AND DELIVERY - All orders for destination in the mainland United States (less Hawaii, Alaska and non-continental United States possessions) will be shipped F.O.B. Flemington, N.J. All destination, shipping and other charges shall be paid by the Customer in accordance with ALTECH's then current shipping and billing practices.

Delivery dates given in the acceptance of any order are approximate. ALTECH shall not be liable for delays in delivery or in performance due to causes beyond its reasonable control including acts of God, acts of Customer, acts of civil or military authority, fires, strikes or other labor disturbances, war, riot or delays in transportation. In the event of such delay, the date of delivery or performance shall be extended for a period equal to the time lost by reason of the delay.

PRICE - PRICES in any ALTECH publication are subject to change without prior notification. Catalog prices are based on prices published in the current price list. All written quotations are valid for thirty (30) days from the date of quotation. Customer shall pay all sales, use, excise or similar taxes whenever ALTECH must itself pay and/or collect such tax from Customer arising out of the sale.

PAYMENT - Customer agrees to make payment within thirty (30) days of date of the invoice from ALTECH. Customer agrees to pay a late payment charge of one and one-half percent (1.5% per month, or the maximum late payment charge permitted by applicable law, whichever is less, on any unpaid amount for each calendar month (or fraction thereof) that such payment is in default. Orders amounting to less than \$100.00 will be billed at \$100.00 plus freight. Full carton purchases are required. In the event of referral to an attorney for collection, reasonable attorney's fees for collection of the overdue amount shall be paid by Customer. In the event payment is not received within 30 days from the date of invoice, any discount shall be cancelled and the full list price will be due.

LIMITED WARRANTY - ALTECH warrants to Customer that the equipment purchases shall be free from defects in material and workmanship under normal use and service for a period of one year from shipment.

Written notice as an explanation of the circumstances of any claim that the equipment has proved defective in material or workmanship shall be given promptly by the Customer to ALTECH.

ALTECH will not be liable for any misuse, improper operations, improper installation, improper maintenance, alteration, modification, accident or unusual degradation of the equipment or parts due to an unsuitable installation environment.

No representation of other affirmation of facts, including but not limited to statements regarding capacity, suitability for use or performance of the equipment, shall be or be deemed to be a warranty or representation by ALTECH for any purpose, nor give rise to any liability or obligation of ALTECH whatsoever.

Customer's sole and exclusive remedy in the event of breach of warranty, as set forth herein, is expressly limited to (1) the correction of the defect by adjustment, repair, modification, or replacement, or (2) issuance of a credit or refund of the purchase price for the defective equipment at ALTECH's election and sole expense.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY EXTENDS ONLY TO THE CUSTOMER FROM ALTECH OR ITS AUTHORIZED DISTRIBUTOR.

LIMITATION OF LIABILITY - IN NO EVENT, SHALL ALTECH BE LIABLE FOR LOSS OF PROFITS, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES ARISING OUT OF ANY BREACH OF THIS AGREEMENT OR OBLIGATIONS UNDER THE AGREEMENT.

ALTECH SHALL NOT BE LIABLE FOR ANY DAMAGES CAUSED BY DELAY IN SHIPMENT, INSTALLATION OR FURNISHING OF EQUIPMENT OR SERVICES UNDER THIS AGREEMENT.

No action arising out of any claimed breach of this Agreement may be brought by either party more than two (2) years after the cause of action has accrued.

PATENT INDEMNITY - ALTECH shall defend or settle any suit or proceeding brought against Customer based on a claim that any equipment made to ALTECH design and furnished hereunder constitutes an infringement of any existing United States patent, provided (ALTECH) is notified promptly in writing and is given complete authorization and information required for the defense, and ALTECH shall pay all damages and costs awarded against Customer, but shall not be responsible for any costs, expense or compromise incurred or made by Customer without ALTECH's prior written consent. If any equipment is in ALTECH's opinion likely to or does become the subject of a claim for patent infringement, ALTECH may at its option and expense procure for Customer the right to continue using the device, modify it to become non-infringing, but in the event ALTECH is not reasonably able to modify, substitute, or otherwise procure for Customer the right to continue using it, ALTECH will remove such equipment and refund to Customer the amount paid in excess of a reasonable rental for past use.

ALTECH shall not be liable for any infringement or claim based upon use of the equipment in combination with other equipment not supplied by ALTECH or with modifications made by Customer.

The foregoing states the entire liability of ALTECH to Customer arising from patent infringement.

SELLER'S REMEDIES - Should Customer fail to make any payment within ten (10) days of its due date, or fail to perform any other of the Customer's obligation hereunder upon thirty (30) days written notice, or should Customer be or become insolvent or be a party to any bankruptcy receivership proceeding prior to full payment of all amounts payable hereunder, ALTECH may: (a) with or without demand or notice to customer declare the entire amount unpaid immediately due and payable; (b) enter upon the premises where the equipment may be found and remove it (Customer shall assemble the equipment and make it available to ALTECH at a place reasonably convenient to both parties and shall permit and assist ALTECH in effecting the retaking and removal of the equipment); and (c) sell any or all the equipment as permitted under applicable law, applying the proceeds of the sale to payment of the expenses of retaking, repairing and selling the equipment, reasonable attorney fees and to the satisfaction of all indebtedness then due and unpaid under this Agreement. Any surplus shall be paid to Customer and any deficiency shall be paid to ALTECH by Customer.

The remedies provided herein shall be cumulative and in addition to all other remedies provided by law or equity or under the Uniform Commercial Code.

GOVERNING LAW - This agreement will be governed by the Laws of the State of New Jersey.

GENERAL - This Agreement shall only become effective and binding when either (a) it has been accepted and executed by an authorized representative of ALTECH, or (b) the equipment has been shipped to Customer, with or without acceptance in writing hereon. Notice of acceptance is hereby waived by Customer. Customer hereby acknowledges receipt of a true and complete copy hereof.

No addition to or modification of any of the Terms and Conditions of Sale as they appear herein shall be binding upon ALTECH unless signed in writing by duly authorized representative of ALTECH in Flemington, N.J.

Typographical and clerical errors in quotations, orders and acknowledgments are subject to correction.

This Agreement is not assignable without the prior written consent of ALTECH. Any attempt to assign any of the rights, duties or obligations of this Agreement without such consent is void.

If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability, of the remaining provisions shall not in any way be affected or impaired thereby.

ALTECH is not responsible for failure to fulfill its obligation under this Agreement due to causes beyond its control, or except as agreed herein.

THE CUSTOMER ACKNOWLEDGES THAT HE HAS READ THE AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS. FURTHERMORE, THE CUSTOMER AGREES THAT IT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN THE PARTIES, WHICH SUPERSEDES ALL PROPOSALS OR PRIOR AGREEMENTS, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, AND ALL OTHER COMMUNICATIONS BETWEEN THE PARTIES RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

Here are other great catalogs available from Altech!

Circuit Protection Devices



Altech the market leader in UL508 Manual Motor Controllers/ Miniature Circuit Breakers now introduces UL489 Miniature Circuit Breakers and UL1077 Supplementary Protectors. The UL489 versions are DIN rail mounted, 17.5mm wide, thermal magnetic, 240V, 480Y/277V AC, 50/60Hz, 125 and 250 VDC models, with short circuit interrupt capacity of 10kA, a positive trip indicator, and are line/load reversible. The UL1077 versions are DIN rail mounted, 17.5mm wide, thermal magnetic, 480Y/277V AC, 50/60Hz, a short circuit withstand capacity 10kA, have a positive trip indicator.

Altech Corp.[®]
35 Royal Rd., Flemington, NJ 08822
908-806-9400
FAX 908-806-9490
www.altechcorp.com

Interface Modules and Power Supplies



Altech offers a wide range of DIN Rail or panel mount cable interface modules, relay interface modules, power supplies, carrier modules, and custom designed modules. Cable to connector models include: D-Sub connectors, ribbon cable connectors, and Dip socket connectors to terminals. Standard relay modules from 1 to 16 channels, and safety relay modules from 1 to 16 channels and up to 10 poles are included. The catalog also contains switching power supplies, linear power supplies, and custom designed interface modules.

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Contactors and More!



Altech's now carries contactors, mini contactors, definite purpose contactors & overload relays. The contactors come in 3 and 4 pole configurations at 9A to 800A. Available in Single Phase (115 - 230V) and Three Phase (200 - 575V) AC and DC models. A large variety of coil voltages are supported and the accessories are auxiliary contacts and overload relays. The mini contactors come in screw clamp, fast-on, cage clamp and solder pin types.

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Terminal Blocks



Altech offers a NEW Terminal Block catalog with the most competitively priced blocks in the industry. We feature screw and spring clamp models for DIN rail and panel mount applications. This advanced line of wire termination products will increase your design options and help to get the job done more efficiently. Our line of blocks include feed-through (single, double or triple level), distribution, ground, fuse, disconnect, thermocouple, surge suppressor and indicator. A wide variety of accessories, tools and ferrules are available.

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Safety Relays



Altech has the broadest line of safety relays that meet the New ASME A17.1-2000 specification. Our Safety Relay catalog and flyer outlines a complete selection of the safety relays featuring forced-guided contacts, a mandatory requirement of the European Machinery Directive EMD 89/392 EEC, which makes them indispensable when designing safety circuits for the international market. Our relays are approved for use in safety applications such as Emergency Stop, Two Hand Safety, Safety Gate, or as specified in IEC 204, EN 60204, and DIN/VDE 0113.

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Liquid Tight Strain Reliefs



This 64-page catalog introduces Altech's full line Liquid Tight Strain Reliefs (Cord Grips) which are used to seal cable entries, keep contaminants from entering enclosures, provide strain relief and thus reduce stress on components and termination points inside enclosures. Available in standard, high-performance, and economy versions, functions include Straight-Through, Increased Strain Relief, Bend Protection, Pull/Bend Protection, Multi-conductor, Flat Cable and EMI/RFI. They can be used with almost any type of cable, cord or conductor - solid, stranded, flat, shielded, high temperature, etc.

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DIN Enclosures



Our NEW catalog features many new models plus our current four distinct DIN Rail mount enclosure families with a multitude of sizes and features. Internationally accepted, these enclosures are offered complete with up to 144 ready-to-wire terminals, integral PC Board guides and a selection of terminal-to-board connection options. They can be customized with imprints, markings, cutouts, etc. and snap onto standard 35mm DIN Rails or can be panel mounted. The catalog is complete with technical drawings to assist you in your designs.

Altech Corp.[®]
35 Royal Rd., Flemington, NJ 08822
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Motor Disconnect Switches



Altech's line of Motor Disconnect Switches are UL 508 listed as Manual Motor Controllers for AC Motor Starting Across-the-line and AC General use. This new 16 page catalog includes the 3 different handle designs, which are all available in gray/black or yellow/red housings. Electrical ratings are 25-150A / 600V. The switches are non-fused DIN Rail mountable. Neat features include: snap-on auxiliary switches, door mounting kit and a retrofit 30A fuse holder. Also featured are Enclosed Motor Disconnect Switches & Fused Enclosed Motor Disconnect Switch (30A) in plastic or stainless housings.

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- Circuit Protection >
 - Connectors & Outlets >
 - Enclosures >
 - European Parts
 - Ferrules
 - Interface Modules
 - Power Supplies
 - Safety Relays
 - Sensors >
 - Switches >
 - Terminal Blocks >**
 - Wire & Cable Protection >
-
- ALL ONLINE CATALOGS
- Ceramic Euroblocks
 - DIN Rail Terminal Blocks**
 - Eurostrips
 - Marking Systems and Plotters
 - Printed Circuit Board Terminal Blocks
 - Power Distribution Blocks



Altech carries RoHs compliant products. Contact Altech for your specific needs. [Click for RoHs details.](#)



[Click here](#) to save on Control Components!

DIN RAIL & PANEL MOUNT TERMINAL BLOCKS

Altech's line of Terminal Blocks is the most competitive in the industry.



- Internationally accepted DIN Rail and Panel Mount Terminal Blocks,
 - Mini Panel Mount, [Eurostrips](#)® and [High Temperature Ceramic](#)



PRINTED CIRCUIT BOARD TERMINAL BLOCKS

Featuring standard single and double level, fixed or pluggable, terminal blocks in metric and US pin spacings.

- Fixed and Pluggable, plus Barrier Strip and Panel Feed-Through Blocks
- Tubular Screw Clamps and Box Clamps
- Screwage Clamps for heavy duty applications.
- Single, Double and Triple Level Configurations
- Millimeter and Inch Pin Spacings (3.5 mm to 10.16 mm)
- RoHs compliant blocks available

BUSBAR SYSTEMS FOR MINIATURE CIRCUIT BREAKERS

Altech's busbar system is an innovative way to jumper Miniature Circuit Breakers.



- Installation time savings
- Panel space savings
- Little or no maintenance
- High electrical rating

UL approved for MCB's. Altech: V-EA, MA and R-Series
ABB: S200-Series
Cutler Hammer: WMS-Series



CONTACTORS, MINI CONTACTORS, DEFINITE PURPOSE CONTACTORS & OVERLOAD RELAYS

Altech's new line of contactors come in 3 and 4 pole configurations at 9A to 800A.



- Single Phase (115 -230V)
- Three Phase (200 - 575V) AC and DC
- A large variety of coil voltages are supported
- Accessories include auxiliary contacts and overload relays
- Mini contactors come in screw clamp, fast-on, cage clamp and solder pin types

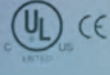


MOTOR DISCONNECT SWITCHES

Altech Motor Disconnect Switches are UL508 Listed Manual Motor Controllers for AC Motor Across-the-line, AC General Use.



- Electrical ratings up to 150A/600V
- Suitable for Motor Disconnect Means
- 60A disconnect is smallest in industry
- Horsepower rated to 75hp
- Extended and direct handles, toggle switches DIN Rail and panel mount
- Enclosed motor disconnect
- Comprehensive range of accessories

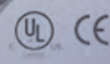


INDUSTRIAL ENCLOSURES

Altech Industrial Enclosures look great, and protect circuit boards, terminal blocks and control and operating devices.



- Aluminum, Polystyrene and Polycarbonate enclosures
- Broad range of sizes
- Functional and appealing designs
- Large selection of accessories
- Customization and imprinting service are available



New Catalog January 2006

Altech Corporation
35 Royal Road
Flemington, NJ 08822-6000
Phone (908) 806-9400
Fax (908) 806-9490
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INDUSTRIAL ENCLOSURES