

CONDUCTIX

INSUL 8

Ⓞ DELACHAUX GROUP

INSULRAIL

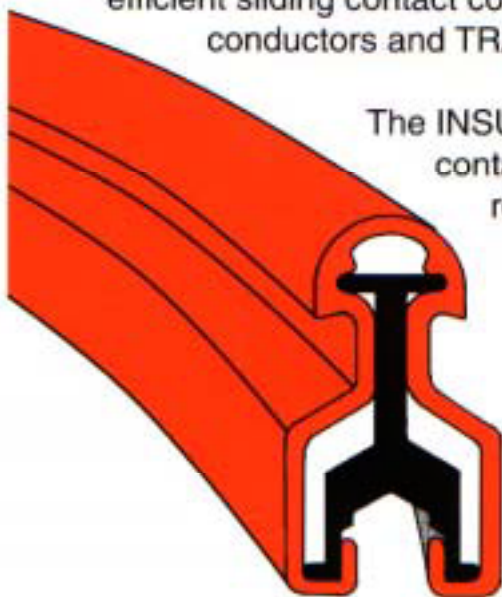
The Conductive Edge in Mobile Electrification for Over 50 years!



INSULRAIL embodies over 30 years of experience and expertise achieved by **CONDUCTIX** in providing industry around the world with quality, engineered conductor systems.

INSULRAIL is now available in two forms: Extruded Electrolytic Copper, and Marine Quality High Conductive Aluminium with a durable efficient Stainless Steel contact surface.

CONDUCTIX pioneered the concept of combining 2 exceptional metals to form a uniquely efficient sliding contact conductor with HEVI-BAR I and II high amperage crane conductors and TRANSIT-BAR high speed M.R.T. systems.

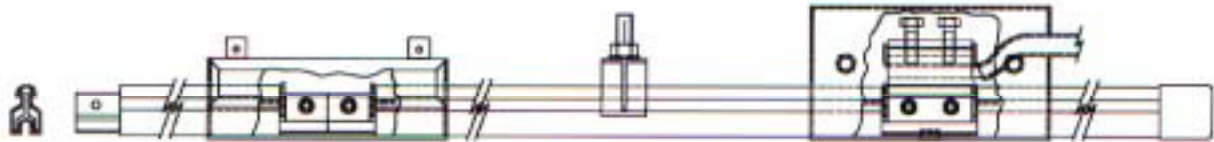


The INSULRAIL aluminium extrusion and stainless steel 'V' contact strip are swaged together by a series of pressure rollers. Immediately prior to this operation, **BOTH** the contact strip and the aluminium interfaces are scoured then protected with E.J.C. compound. This proven method guarantees conductivity between the laminated bi-metal surfaces. A high quality Electrical Orange sheath insulates the conductor to WORLD standard.

INSULRAIL a 1st Class conductor in anyones language.

SAFE • EFFICIENT • RELIABLE CONDUCTOR





Conductor Bars:

These combine the high electrical efficiency, structural rigidity and ease of installation of aluminium with a long wearing stainless steel contact surface of the inverted vee design. All lengths are easily handled and are joined by bolted splice.

Insulating Covers:

Standard conductor bar covers of PVC meet all requirements for electrical insulation and may be used in or outdoors. Standard PVC covers are suitable to operating temperatures to 75°C.

Expansion Sections:

Expansion sections are used at all structural expansion joints and for long runways to compensate for thermal expansion. Powerfeeds and flexible jumpers are factory installed to meet electrical and mechanical requirements of each system.

Powerfeeds:

Powerfeeds are designed to accept up to two flexible cables 50mm². Covers are moulded of high impact polycarbonate.

Hanger Clamps/Anchor Clamps:

The polycarbonate and steel snap-in hanger clamps support the conductors, and are of sliding-tight design. Anchor Clamps are designed to grip and support the conductors anchor-tight, and are used at anchor points only.

Collectors:

All are of the sliding contact type which confines wear to the easily replaceable contact shoes. Insulated contact heads are mounted on spring-loaded collector arms to both articulate and swivel. No exposed metal surfaces carry current, as mounts are grounded.

CONDUCTORS - ENGINEERING DATA

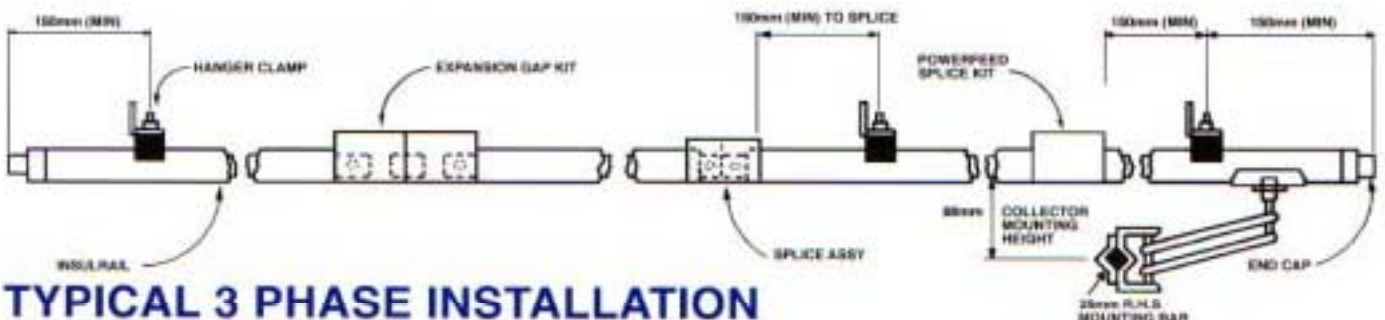
PART No.	*RATINGS	MATERIAL	COVER	LENGTH	AREA mm ²	WEIGHT 4m LENGTH	RESISTANCE D.C. (R) /m	REACTANCE (X) /m	IMPEDENCE (Z) /m
25700	320A	AL/S.S.	P.V.C.	4m	140	2.6kg	.000216	.000170	.000239
98064	500A	Copper	P.V.C.	4m	140	8.0kg	.000131	.000184	.000190

* RATINGS ARE CONTINUOUS BASED ON TEMP. RISE OF 40°C OVER A 30°C AMBIENT

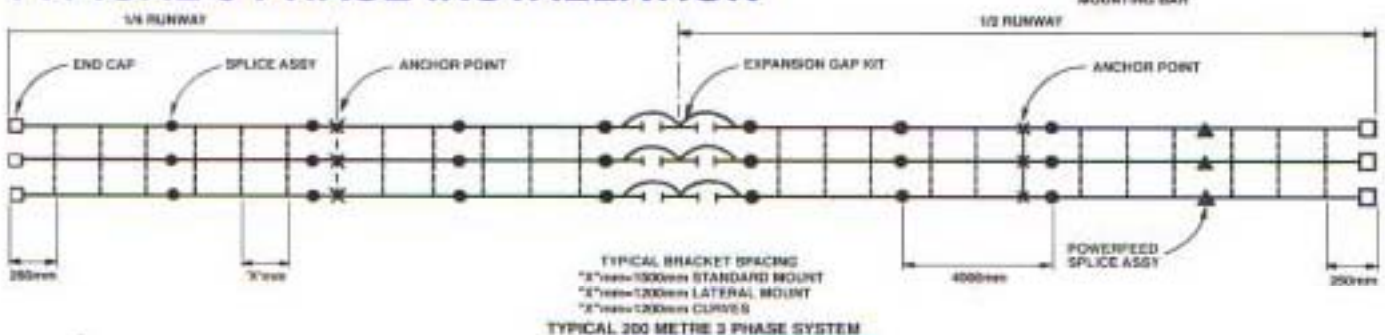
FIGS. BASED ON 75mm CONDUCTOR SPACING

Voltage Drop Calculations:

AC 3 Ø $V = L \times I \times Z \times 1.73$ Where L = LENGTH
 AC 1 Ø $V = L \times I \times Z \times 2$ I = Current Load
 DC 2 Wire $V = L \times I \times R \times 2$



TYPICAL 3 PHASE INSTALLATION



Insulated Conductor Bar

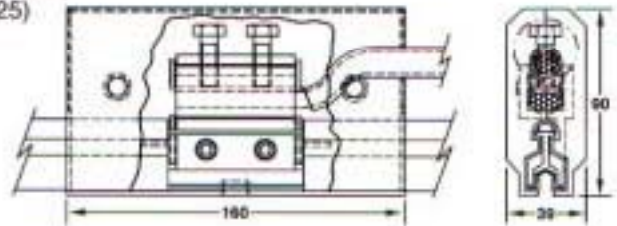
Part No. 25700
Weight (2.6)

Standard length 4 metres



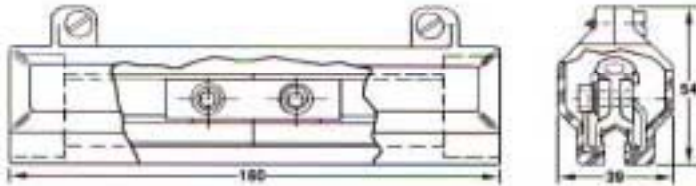
Power Feed Assembly

Part No. 25704
Weight (0.25)



Splice Assembly

Part No. 25702
Weight (0.1)



End Cover
Part No. 98903

Plastic Snap-in Hanger Clamps



Up to 120° C

Part No. 22800
Polycarbonate plastic
with plated hardware
Weight (0.05)

Steel Snap-in Hanger Clamps



Not recommended for
lateral mount or curves

Part No. 21600
Spring steel
with plated hardware
Weight (0.05)

Anchor Clamps



Part No. 21833
With plated
hardware
Weight (0.14)

Note: Hanger and Anchor Clamps are available with stainless steel hardware and with Insulators

Collectors



"C" Base

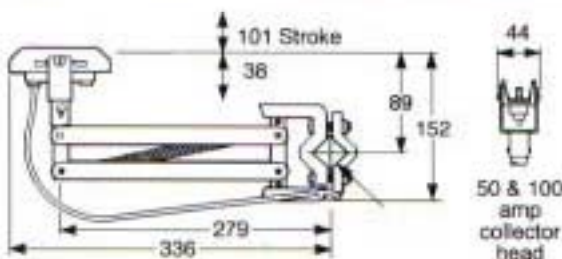


"H" Base

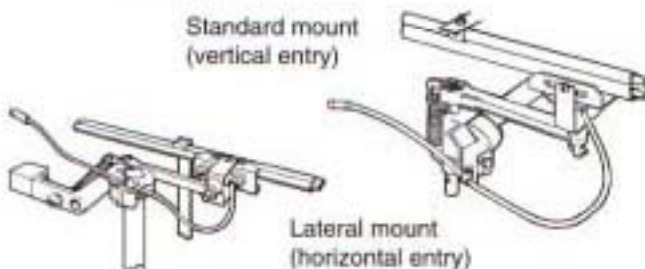
Part No.	Weight	Description
98067	(1.3)	Standard mount 30 Amp
25708	(1.4)	Standard mount 100 Amp
25709	(2.6)	Standard tandem mount 200 Amp

Part No.	Weight	Description
98426	(1.0)	Standard mount 30 Amp
98425	(1.0)	Standard mount 100 Amp

For lateral mount, consult factory.



Standard mount
(vertical entry)



Lateral mount
(horizontal entry)

Contact Shoe Spring Pressure
100amp collectors 2.72 - 4kg

ACCESSORIES

Part No.	Description
A163	Danger Sign
A164	Collector Mounting Bracket
21600	Steel "Snap-in" Hanger Clamp
21833	Anchor Clamp Assembly
22800	Polycarbonate "Snap-in" Hanger Clamp
25702	Splice Assembly c/w Cover 320 Amp
25703	Isolating Assembly c/w Cover 320 Amp
25704	Powerfeed Assembly c/w Cover 320 Amp
25706	Transfer Cap
25707	Expansion Assembly c/w Cover 320 Amp
98057	Powerfeed Assembly c/w Cover 500 Amp
98058	Expansion Assembly c/w Cover 500 Amp
98059	Splice Assembly c/w Cover 500
98122	Joint Compound (Tube)
98903	End Cover
98980	Pick Up Guide Assembly
99131	Standard Mounting Bracket 3 Phase
98065	Collector Brush 30 Amp
98028	Collector Brush 100 Amp