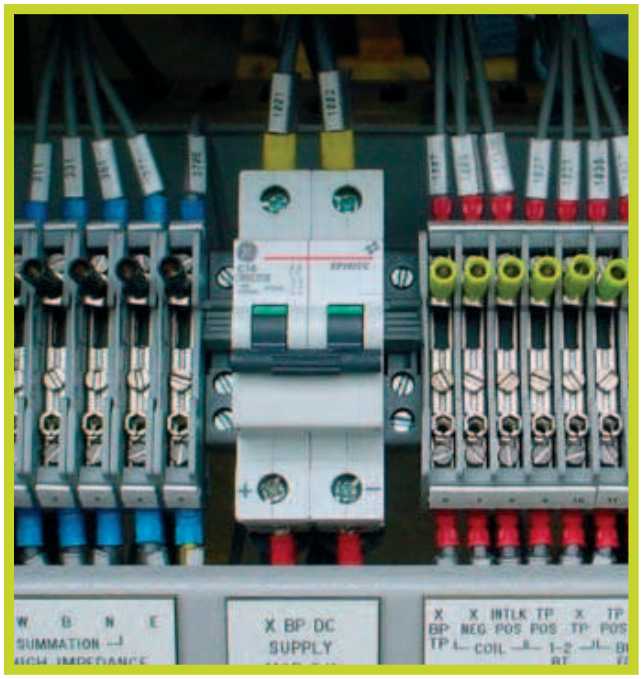
Pre-Insulated Terminals

CABAC's range of pre-insulated terminals is comprehensive, and is being developed continually as switchgear, contactors, terminal blocks, etc. evolve. In more recent years terminals have been getting smaller, and we have developed our range of 0.5mm tab thickness quick connectors, increased our range of bootlace pins and introduced the 0.3mm² range of terminals to name a few developments. Our terminals are high quality 300V terminals having many advanced features for ease of use.

- High quality product meeting International Standards
- Long-term electrical integrity
- A unique funnel entry that speeds wire terminating and increases reliability
- Translucent nylon in fully insulated quick connectors reduces installation errors
- Full technical backup including QA
- Approved by government authorities
- Conforms to AS 3169 and AS 4437

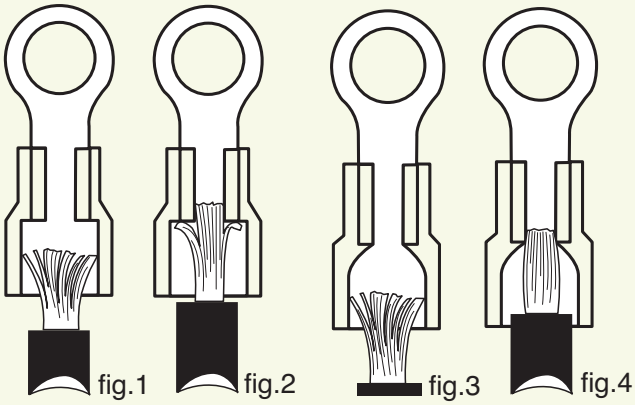
All terminals should be crimped onto the conductor using a CABAC crimper or any quality crimper that is designed to crimp the specific terminal type. If unsure of the terminal/conductor/crimper combination refer to the technical information following and test the nominal pull out force of the crimped connection. If the conductor does not pull out when the nominal pull out force is applied and held for one minute, this will give a good indication of the integrity of the joint. We offer a vast range of crimpers for various applications and terminal types that are shown in the tooling section at the back of this catalogue.



Funnel Entry

The funnel entry has been specifically developed to speed up wire terminating, while ensuring maximum reliability of the crimped connection. Only single grip terminals are funnel entry.

- Speeds insertion of the wire
- Avoids strands folding back and minimises short-circuit risks
- Reduces stripping tolerances
- Speeds and simplifies the operation, reducing errors and rejects
- Reduces installation time



Standard Entry

Fig. 1
Having stripped the insulation, the wire strands tend to 'spring', resulting in a difficult insertion.

Fig. 2
Not all strands are inserted into the terminal barrel, therefore the wire section is only partially crimped.

Funnel Entry

Fig. 3
All of the wire strands are properly funnelled into the terminal barrel.

Fig. 4
The wire section can be fully crimped and is both electrically and mechanically more reliable.

Pre-Insulated Terminals

Nominal Current Ratings

Terminal colour	Yellow	Red	Blue	Yellow
Conductor Range (mm^2)	0.2-0.5	0.5-1.6	1.0-2.6	2.5-6.0
Ring Terminal	8A	24A	32A	48A
Forked Spade	6A	18A	24A	36A
Pin Connector	5A	12A	16A	24A
Lip/Flat Blade	–	24A	32A	48A
Bullet	–	12A	16A	
In Line Splice	–	24A	32A	48A
Quick Connector	–	24A	32A	48A
End Connector	–	24A	32A	48A

NOTE: These ratings are a notional suggestions and cover most situations. It assumes defect-free workmanship, natural ambient conditions, and accepted practices within AS 3000.

Stripping Lengths

Terminal Colour	Yellow	Red	Blue	Yellow
Conductor Range (mm^2)	0.2-0.5	0.5-1.6	1.0-2.6	2.5-6.0
Strip Length for Terminals	4-5mm	4-5mm	5-6mm	6-7mm
Strip Length for in Line Splice	-	7-8mm	7-8mm	7-8mm

In general, the wire should protrude 1mm out of the front of the terminal.

Technical Data

Conductive Material (except Quick Connect Range)

Copper	99.9% pure
Tensile Strength	200 MPa
Ductile Rating	35%
Final Metal State	Fully annealed
Oxygen Content	50ppm max

Conductive Material (Quick Connect Range)

Brass	30% Zinc 70% Copper
Tensile Strength	580 MPa
Ductile Rating	6% min
Final Metal State	Annealed

Electroplating

Material	Tin
Tin Content	99.9%
Other Metals	Lead + Antimony
Plating Thickness	2.5 microns

General Electrical Properties

Total Conductivity	99.5% IACS
Total Resistivity	1.738 micro-ohm cm

Insulation

Material	PVC for all except nylon 6 or nylon 66 - for FIQC
Breakdown voltage	1.5kV (min)
Insulation resistance	Above 100 meg ohms
Working voltage	Up to 300V AC/DC

Working Temperature

Pre-Insulate	-40°C to +105°C
Brass	145°C
Tin plated	160°C

Conformant Standards

AS4437, AS3169 Australia
CSA Canada
IEC Europe
UL Nema USA
Demko Denmark
DIN VDE Germany
Kema Holland
JIS Japan; Nemko Norway
ASE Switzerland
BS United Kingdom

Torque Recommendations

For hardware being metric 8.8 tensile grade.

Thread dia (mm)	Torque (Nm)
3	2
4	3
5	5
6	9
8	22
10	44
12	77

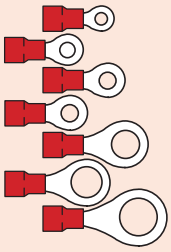
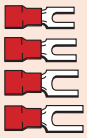
Nominal Pull Out Force

Wire size (mm^2)	Pull out force kg (N)
0.25	4.6 (45)
0.50	6.0 (59)
0.75	8.6 (84)
1.00	10.1 (100)
1.50	13.2 (130)
2.50	19.6 (192)
4.00	26.5 (260)
6.00	35.2 (345)

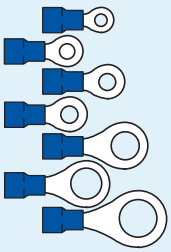
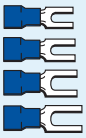
Pull out should be checked for each tool/terminal combination.

Pre-Insulated Terminals

Pre-Insulated

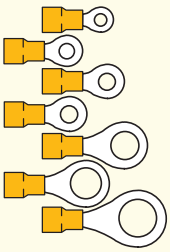
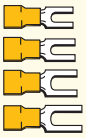
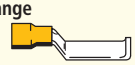
STUD SIZE	CONDUCTOR 0.5-1.6mm²	PACK QTY	SINGLE GRIP	DOUBLE GRIP
RING TERMINAL – RT Range				
M3		100	RT1.25-3	RT1.25-3DG
M4		100	RT1.25-4	RT1.25-4DG
M5		100	RT1.25-5	RT1.25-5DG
M6		50	RT1.25-6	RT1.25-6DG
M8		50	RT1.25-8	RT1.25-8DG
M10		25	RT1.25-10	RT1.25-10DG
M12		25		RT1.25-12DG
FORKED SPADE – FS Range				
M3		100	FS1.25-3	FS1.25-3DG
M4		100	FS1.25-4	FS1.25-4DG
M5		50	FS1.25-5	FS1.25-5DG
M6		50	FS1.25-6	FS1.25-6DG
PIN CONNECTOR - PC Range		100	PC1.25	PC1.25DG
LIP BLADE - LB Range				
Width 3mm		50	LB1.25-3	LB1.25-3DG
Width 5mm		50		LB1.25-5DG
FLAT BLADE - FB Range				
Dim. 1.9 x 11.7		100	FB1.25-2	FB1.25-2DG
Dim. 2.3 x 17		100	FB1.25-2.3/17	
Dim. 3 x 13		100	FB1.25-3	FB1.25-3DG
BULLET CONNECTOR - BC Range				
4mm Bullet		100		MBC1.25DG
		25		FBC1.25DG
IN LINE SPLICE - ILS Range		50	ILS1.25	ILS1.25DG
				See also page A11 and A12
QUICK CONNECTOR - QC Range				
Tab 6.4 x 0.8mm		100		PB1.25-6.4DG
Tab 2.8 x 0.5mm		100		QC1.25-2.8/.5DG
Tab 2.8 x 0.8mm		100		QC1.25-2.8DG
Tab 4.8 x 0.5mm		100		QC1.25-4.8/.5DG
Tab 4.8 x 0.8mm		100		QC1.25-4.8DG
Tab 6.4 x 0.8mm		100		QC1.25-6.4DG
Tab 4.8 x 0.5mm		50	FIQC1.25-4.8/.5	
Tab 6.4 x 0.8mm		50		FIQC1.25-6.4DG
Tab 6.4 x 0.8mm		100		MT1.25-6.4DG
Tab 6.4 x 0.8mm		50		FIMT1.25-6.4DG
Tab 6.4 x 0.8mm Flag	 Requires KFLAG Tool	25	FIFQC1.25-6.4	
END CONNECTOR - EC Range		50	EC1.25	

Pre-Insulated

STUD SIZE	CONDUCTOR 1.0-2.6mm²	PACK QTY	SINGLE GRIP	DOUBLE GRIP
RING TERMINAL - RT Range				
M3		100	RT2-3	RT2-3DG
M4		100	RT2-4	RT2-4DG
M5		100	RT2-5	RT2-5DG
M6		50	RT2-6	RT2-6DG
M8		50	RT2-8	RT2-8DG
M10		25	RT2-10	RT2-10DG
M12		25	RT2-12	RT2-12DG
FORKED SPADE - FS Range				
M3		100	FS2-3	FS2-3DG
M4		100	FS2-4	FS2-4DG
M5		50	FS2-5	FS2-5DG
M6		50	FS2-6	FS2-6DG
PIN CONNECTOR - PC Range		100	PC2	PC2DG
LIP BLADE - LB Range				
Width 3mm		50	LB2-3	LB2-3DG
Width 5mm		50		LB2-5DG
FLAT BLADE - FB Range				
Dim. 2.5 x 11.7		100	FB2-2.5	FB2-2.5DG
Dim. 2.5 x 17		100	FB2-2.5/17	
Dim. 3.5 x 13		100	FB2-3.5	FB2-3.5DG
BULLET CONNECTOR - BC Range				
5mm Bullet		50		MBC2DG
		25		FBC2DG
IN LINE SPLICE - ILS Range		50	ILS2	ILS2DG
				See also page A11 and A12
QUICK CONNECTOR - QC Range				
Tab 6.4 x 0.8mm		50		PB2-6.4DG
Tab 2.8 x 0.8mm		100		QC2-2.8DG
Tab 4.8 x 0.5mm		100		QC2-4.8/.5DG
Tab 4.8 x 0.8mm		100		QC2-4.8DG
Tab 6.4 x 0.8mm		50		QC2-6.4DG
Tab 4.8 x 0.5mm		50	FIQC 2-4.8/.5	
Tab 6.4 x 0.8mm		50		FIQC2-6.4DG
Tab 6.4 x 0.8mm		100		MT2-6.4DG
Tab 6.4 x 0.8mm		50		FIMT2-6.4DG
Tab 6.4 x 0.8mm Flag	 Requires KFLAG Tool	25	FIFQC2-6.4	
END CONNECTOR - EC Range		50	EC2	

Pre/Un-insulated & Brass Terminals

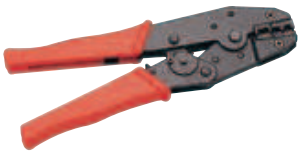
Pre-Insulated

STUD SIZE	CONDUCTOR 2.5-6.0mm²	PACK QTY	SINGLE GRIP	DOUBLE GRIP
RING TERMINAL - RT Range				
M3		50	RT5.5-3	RT5.5-3DG
M4		50	RT5.5-4	RT5.5-4DG
M5		50	RT5.5-5	RT5.5-5DG
M6		25	RT5.5-6	RT5.5-6DG
M8		25	RT5.5-8	RT5.5-8DG
M10		25	RT5.5-10	RT5.5-10DG
M12		25	RT5.5-12	RT5.5-12DG
FORKED SPADE - FS Range				
M3		50	FS5.5-3	FS5.5-3DG
M4		50	FS5.5-4	FS5.5-4DG
M5		50	FS5.5-5	FS5.5-5DG
M6		25	FS5.5-6	FS5.5-6DG
			Refer page A10 for Forked Spade 10mm²-16mm²	
PIN CONNECTOR - PC Range				
		50	PC5.5	PC5.5DG
			Refer page A11 for Pin Connector 10mm²-35mm²	
LIP BLADE - LB Range				
Width 5mm		50		LB5.5-5DG
FLAT BLADE - FB Range				
Dim. 2.9 x 16.6		50	FB5.5-3	FB5.5-3DG
Dim. 4 x 13		50	FB5.5-4	FB5.5-4DG
IN LINE SPLICE - ILS Range				
		25	ILS5.5	ILS5.5DG
			See also page A11 and A12	
QUICK CONNECTOR - QC Range 0.8mm Tabs				
Tab 6.4mm		50		QC5.5-6.4DG
Tab 6.4mm		50		MT5.5-6.4DG
Tab 6.4mm		25		FIQC5.5-6.4DG
Tab 6.4mm		25		FIMT5.5-6.4DG
Tab 9.5mm		25		QC5.5-9.5DG
END CONNECTOR - EC Range		25	EC5.5	

Un-Insulated & Brass Range

STUD SIZE	PACK Qty	CONDUCTOR RANGE (mm²) 0.5-1.6	1.0-2.6	2.5-6.0
RING TERMINAL - UNINSULATED - RTU Range				
M3	100	RTU1.25-3	RTU2-3	
M4	100	RTU1.25-4	RTU2-4	RTU5.5-4
M5	100	RTU1.25-5	RTU2-5	RTU5.5-5
M6	100	RTU1.25-6	RTU2-6	RTU5.5-6
M8	100 / 50	RTU1.25-8	RTU2-8	RTU5.5-8
M10	50	RTU1.25-10	RTU2-10	RTU5.5-10
M12	50			RTU5.5-12
M16	50			RTU5.5-16
FORKED SPADE – UNINSULATED - FSU Range				
M3	100	FSU1.25-3	FSU2-3	
M4	100	FSU1.25-4	FSU2-4	FSU5.5-4
M5	100 / 50	FSU1.25-5	FSU2-5	FSU5.5-5
M6	50			FSU5.5-6
QUICK CONNECTOR BRASS - QCB Range				
Tab 6.4mm x 0.8	50		PBA6.4	
Tab 2.8mm x 0.5	100	QCB1.25-2.8		
Tab 4.8mm x 0.8	100	QCB1.25-4.8		
Tab 6.4mm x 0.8	100	QCB1.25-6.4		
Tab 6.4mm x 0.8	100		QCB2-6.4F	
Tab 6.4mm x 0.8	100	MTB1.25-6.4		
	Crimp Tool for Brass range HF1 (professional) HF2 (low cost)			
	Note: QCB2-6.4F Should be crimped with pliers and pull out checked			
QUICK CONNECTOR NICKEL SILVER - QCN Range				
Tab 6.4mm	100	QCN1.25-6.4		
RING STAR - RS Range				
Stud Size				
5mm	50		RS-5	
6mm	50		RS-6	

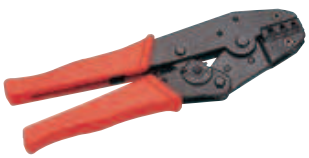
Please refer to Section G for CABAC's full range of tools. Below are some common tools for this range.



KTC1, KTC2, KTC3
Pre-Insulated Crimper, General Purpose

HP3
Pre-Insulated Crimper, Professional

HN2
Uninsulated Terminal Crimper



HF2
Brass Roll Crimper