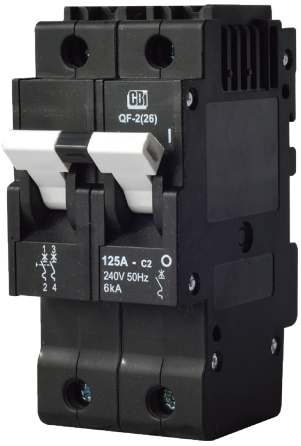
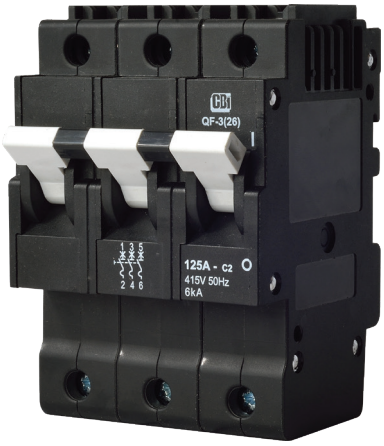
QF(26)HR - Series Miniature Circuit Breakers

1 Pole
Dual (DIN & mini rail) mount



2 Pole
Dual (DIN & mini rail) mount



3 Pole
Dual (DIN & mini rail) mount

3 Pole + N
Dual (DIN & mini rail) mount

Features

- AC circuit breaker
- Hydraulic-magnetic technology
- 100% rated current capability, independent of ambient temperature
- One, two, three pole, 1+N and 3+N (VDE)
- VC 8036 (SANS 556-1) and CE compliant
- VDE and EAC approved
- Ratings 60 A to 100 A (UL 489)
- Ratings 60 A to 125 A (IEC 60947-2)
- Available in various currents and time delays
- Precision tripping characteristics
- Can be switched immediately after tripping
- Dual (DIN & mini rail) mount, 57 mm front escutcheon (Black)
- Suitable to use for electrical isolation

Applications

- AC branch circuit protection (DIN / EN 60947-2)
- Switch disconnector (DIN / EN 60947-3, UL 508)
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Mobile power generation equipment
- Railway signalling equipment
- Residential equipment
- Industrial equipment

Optional Accessories

- Handle lock - QFAP001
- Surface mounting clips - 2096001
- Escutcheon blank - SFEB000
- Safety blank - SAEB000

VC 8036 (SANS 556-1)
(SANS IEC 60947-2)

(DIN / EN 60947-2/3)

(UL 508)
(Switch only)

(UL 489)

(GB 14048.2 / 3)

(IEC 60947-2/3)

Hydraulic-Magnetic Circuit Breakers 100% rated, unaffected by ambient temperature

QF(26)HR - Series Miniature Circuit Breakers

Technical Data

Product Type	Circuit Breaker				
Approvals	DIN / EN 60947-2, EAC, CE, UKCA, VC 8036 (SANS 556-1)				
Number of Poles	1	2 (1+N)	2	3	4 (3+N)
Operating Voltages	240 Vac		415 Vac		
Minimum Current Rating	70 A				
Maximum Current Rating	125 A				
Ultimate S/C Breaking Capacity (Icu)	6 kA (IEC), 5 kA (VC 8036)				

Product Type	Circuit Breaker		
Approvals	GB/T14048.2		
Number of Poles	1	1 + N	2, 3, 3 + N, 4
Operating Voltages	240 Vac		415 Vac
Minimum Current Rating	60 A		
Maximum Current Rating	125 A		
Ultimate S/C Breaking Capacity (Icu)	6 kA		

Product Type	Circuit Breaker	
Approvals	UL 489	
Number of Poles	1	2
Operating Voltages	120 Vac	120 / 240 Vac
Minimum Current Rating	60 A	
Maximum Current Rating	100 A	
Ampere Interrrupting Capacity (AIC)	10 kA	

Product Type	Switch Disconnector				
Approvals	VC 8036 (SANS 556-1), DIN / EN 60947-3, UL 508, GB/T14048.3				
Number of Poles	1	2	3	4	4 (3+N)
Operating Voltages	240 Vac	415 Vac			
Current Rating	125 A				
Short-time Withstand	6 kA / 50 ms				

QF(26)HR - Series Miniature Circuit Breakers

Technical Data

Product Type	QF(26)HR
Ambient Operating Temperature	-40 °C to +85 °C
Mounting Options	Dual (DIN & mini rail) mount, surface mount
Time Delay Curves	1, 2
Endurance	10000 operations - 1500 with current, 8500 without current (IEC 60947-2 Clause 7.2.4.2)*
Dielectric Strength	1000 - 2000 Vac for one minute (IEC 60947-2 Clause 8.3.3.3)*
Rated Impulse Withstand Voltage	6 kV (IEC 60947-2 Clause 8.3.3.2)
Weight	200 g per pole (unpacked)
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	50 G to MIL-STD-202G, test method 213B, test condition 1
Vibration	10 G to MIL-STD-202G test method 204D, test condition A
Flammability	I3 - Ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

* Refer to standard for details.

Circuit Breaker	Wire Size (IEC)	Wire Gauge (UL)	Torque (IEC)	Torque (UL)	Comments
Main Terminals	1 mm² - 50 mm²	6 – 1 AWG	4 Nm	35.4 in-lb	Pozidriv #2 Combi head

CBI electric
low voltage

QF(26)HR - Series Miniature Circuit Breakers

Long Code

Example Code: QF-----3(26)-DM-2-125A-HR---

Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Requirement	QF Frame	Switch / neutral	N/A	No of poles	Module width	Dual mount	Medium delay curve	Current rating	Mecha-nism Type	Shunt trip	Future use	Future use	Customer specific
Long Code	**QF**	**-**	**-**	**3**	**(26)**	**DM**	**2**	**125A**	**HR**	**-**	**-**	**-**	**-**

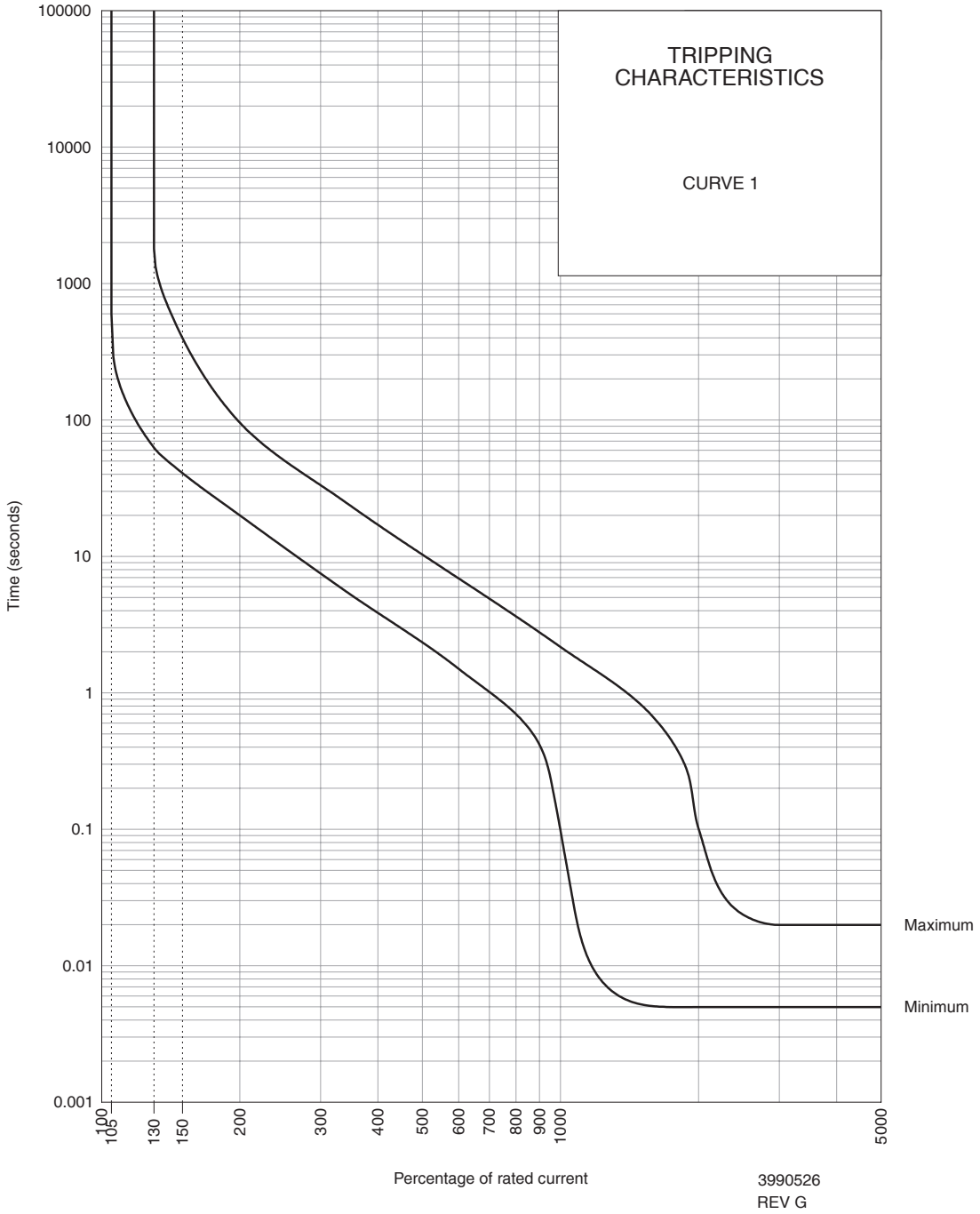
Ordering Information

Group 1: Frame Type	**Code**	**Description**	**Comments**	
	QF	Miniature circuit breaker		
Group 2: Switch/Neutral	**Code**	**Description**	**Comments**	
	-	Not applicable		
	N	Neutral	Green handle	
Group 3: Auxiliary	**Code**	**Description**	**Comments**	
	-	Not applicable		
Group 4: No. of Poles	**Code**	**Description**	**Comments**	
	1	Single pole		
	2	Double pole	2 pole or 1+N	
	3	Triple pole		
	4	Four pole	3+N only	
Group 5: Module Width	**Code**	**Description**	**Comments**	
	(26)	26 mm module width		
Group 6: Mounting	**Code**	**Description**	**Comments**	
	DM	Dual (DIN & mini rail) mount	Dual mount supplied in black only - 57 mm front escutcheon	
Group 7: Time Delays	**Code**	**Description**	**Instantaneous Trip Point (x In)**	**Comments**
	1	Long time delay, high instantaneous trip	10 – 20	Orange handle
	2	Medium time delay	5 – 10	White handle
Group 8: Current Ratings	**Code / Description**		**Comments**	
	60, 70, 80, 90, 100, 125 A			
Group 9: Type Mechanism	**Code**	**Description**	**Comments**	
	HR	SF Mechanism, High rating		
Group 10: Shunt Trip	**Code**	**Description**	**Comments**	
	-	Not applicable		
Group 11	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	
Group 12 Special Termination	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	
Group 13 Customer Specific	**Code**	**Description**	**Comments**	
	-	Not applicable	For future use	

For options not listed, please contact CBI

QF(26)HR - Series Miniature Circuit Breakers

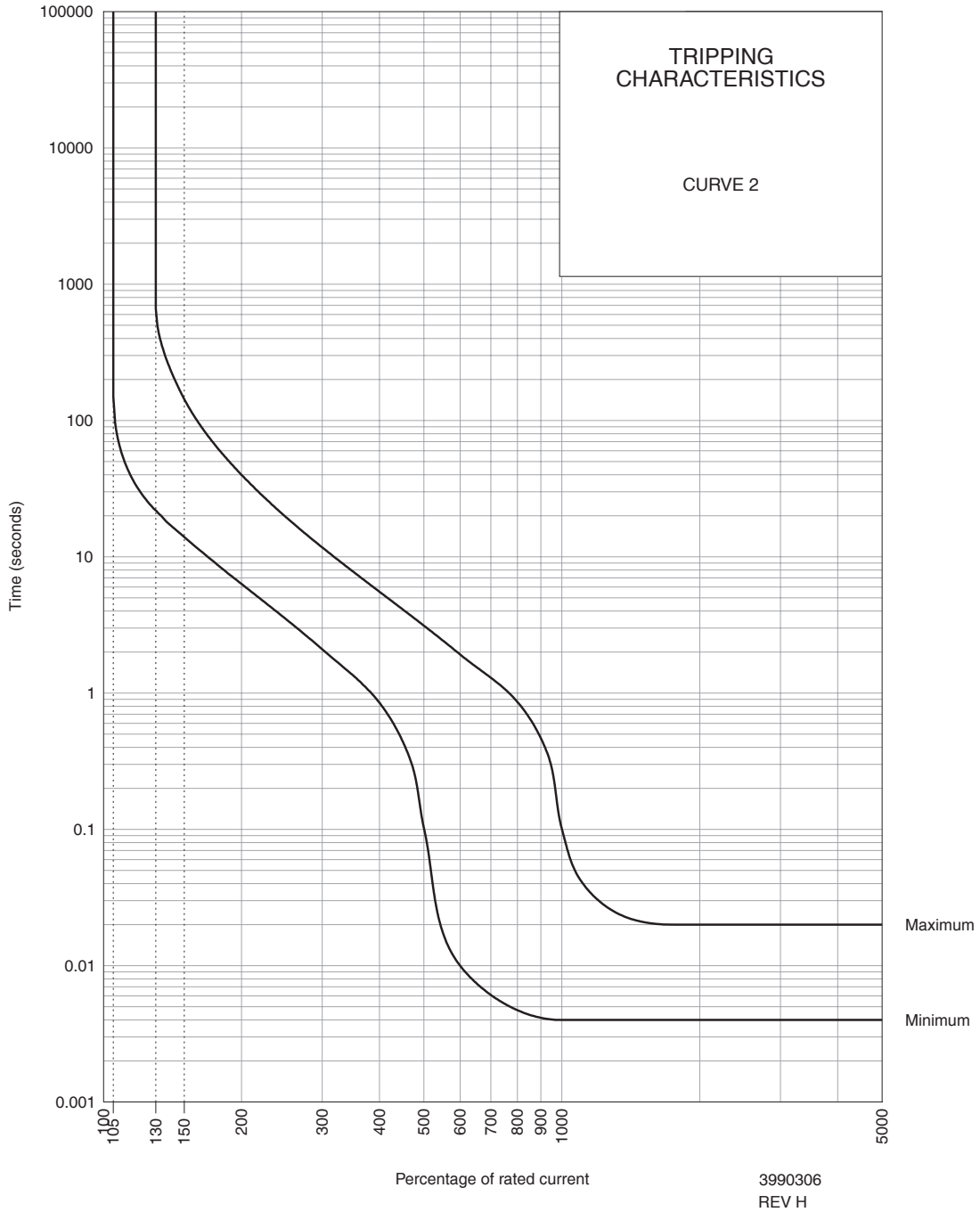
Time Delay Curve



PERCENTAGE OF RATED CURRENT	105%	130%	145%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	63	45	41	20	7.5	3.8	2.3	1.5	1.01	0.7	0.42	0.1	0.005
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	1800	503	400	96	34	17	10.3	6.8	4.9	3.6	2.8	2.2	0.1

QF(26)HR - Series Miniature Circuit Breakers

Time Delay Curve

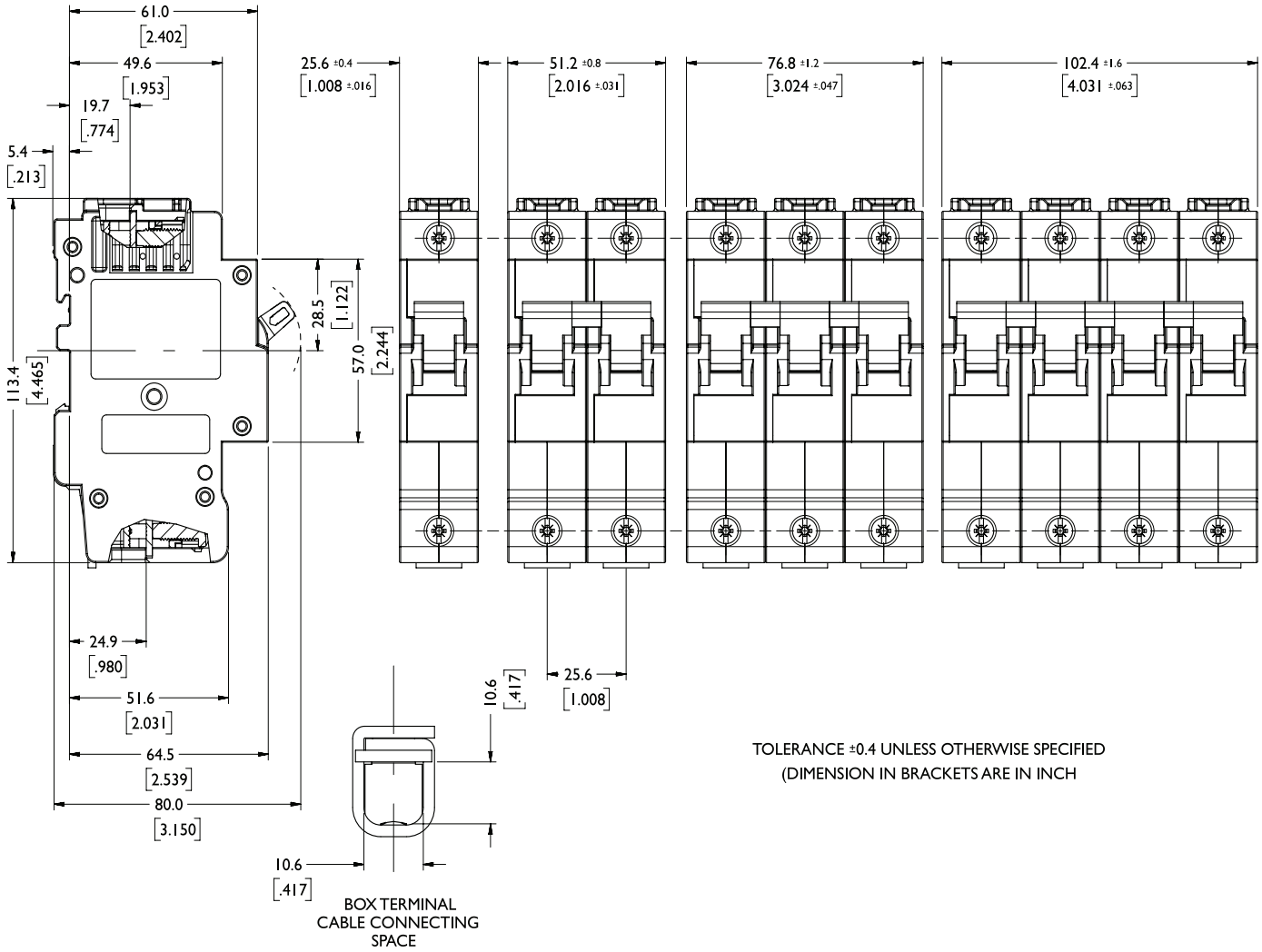


PERCENTAGE OF RATED CURRENT	105%	130%	145%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	22	15.4	14	6.3	2.1	0.85	0.1	0.001	0.006	0.005	0.041	0.004	0.004
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	660	180	144	40	12	5.5	3	1.92	1.3	0.86	0.47	0.1	0.02

* The published time delay curves are generated at 30°C ambient temperature with the circuit breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

QF(26)HR - Series Miniature Circuit Breakers

Outline Dimensions: Dual (DIN & mini rail) mount



Please review our Customer Terms and Conditions on www.cbi-lowvoltage.co.za
All rights reserved. Unless otherwise indicated, all materials on these pages are copyrighted by CBI (Pty) Ltd. No part of these pages, either text or image may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical or otherwise, for reasons other than personal use, is strictly prohibited without prior written permission. CBI (Pty) Ltd reserves the right to alter any details of this document without notice and while every effort is made to ensure the accuracy of the content, no warranty is given as to the accuracy of this document and no responsibility will be accepted for error or misinterpretation and any resulting loss.

AUSTRALIA
CBI-electric: Australia
27 Wedgewood Rd, Hallam
Victoria 3803 Australia
Tel: +61 3 8752 9300
Fax: +61 3 9796 5407
Email: sales@cbi-electric.com.au
Website: www.cbi-electric.com.au

SOUTH AFRICA
CBI-electric: low voltage
Tripswitch Drive Elandsfontein
Gauteng South Africa
Tel: +27 11 928 2000
Fax: + 27 11 392 2354
Email: cbi@cbi-electric.com
internationalsales@cbi-electric.com
Website: www.cbi-lowvoltage.com

USA
CBI-electric: North America
35 E. Uwchlan Ave Suite 328
Exton PA 19341 USA
Tel: +1 610 524 9949
Fax: +1 610 524 9945
E-mail: info@cbibreakers.com
Website: www.cbibreakers.com

A member of the REUNERT Group