

The EL305 and EL306 earth leakage relays detect residual currents and are designed to trip the supply MCCB. They have a large 50 mm diameter for conductor access or can be ordered with up to 190 mm external CTs. These earth leakages relays are designed with compact thermoplastic cases.







Features

- Easy to install, convenient clip-tray mounting
- 50 mm diameter for conductor access
- Optional remote CTs (70, 105, 152, 190 mm dia.) Available for larger conductors, or for remote sensing
- Earth leakage test button to verify that the power supply, sensing and detecting circuits as well as the MCCB tripping mechanism is in working order
- Remote tripping facility available on request
- Highly stable on long cables and on motor starting
- Available in instantaneous (EL305) or time delay (EL306) types
- · Immune to the effects of pulsating DC
- High immunity to nuisance tripping due to high voltage surges,
 e.g. lightning
- · Latching trip with indicator flag

Applications

 Used in heavy industrial and mining applications to detect leakage currents.



Technical Data

Product Type	EL305	EL306			
Rated Voltage (V)	Specify: 110, 220, 380, 525 Vac	110 - 525 Vac			
Tripping Mechanism	Can be used in conjunction with a shunt trip or UVR operated circuit breaker or trippable isolator				
Mounting Options	Surface mount, Mount plate included. Screw, rivet or weld mount plate in place, then clip relay in. Clip tray				
Ambient Operating Temperature	-5 °C to	-5 °C to +60 °C			
Time Delay Curves	Inverse time delay (at 20 A 375 mA : 0.25 s 500 mA : 0.5 s < 0.040 s 1000 mA : 1.0 s 2000 mA : 1.5 s 5000 mA : 2.0 s				
Weight	0.8 kg	1 kg			
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.				
Connections	Flyleads: supply and shunt trip connection. Screw terminals for N/C contact.				

Remote CT with Mounting Bracket								
0.0	*Dimensions	RC3	RC4	RC6	RC8			
• O.D. →	ID	70	105	152	190			
~ ~	OD	140	140 160		315			
	Н	152	187	265	332			
H	Weight	1,5 kg	1,7 kg	6,1 kg	9,0 kg			

^{*} Typical Dimensions



Long Code

Example Code: EL3050030110--

Group	1	2	3	4	5
Requirement	Туре	Sensitivity 30 mA	Voltage 110 Vac	Remote CT None	Remote Test Button None
Long Code	EL305	0030	110	-	-

Ordering Information

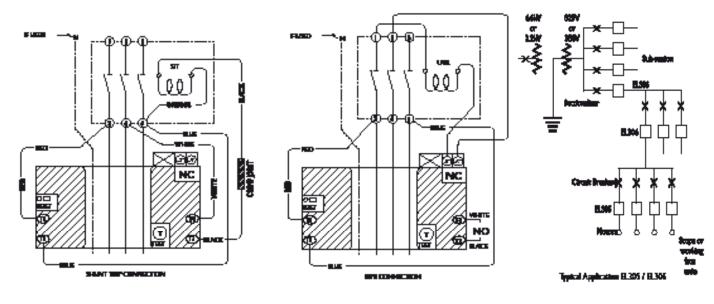
	Code	Description	Comments				
Group 1: Type	EL305	Instantaneous unit					
Туре	EL306	Time delay unit					
	Code	Description	Comments				
	0030	30 mA					
	0050	50 mA					
	0100	100 mA					
	0125	125 mA					
Group 2: Sensitivity	0250	250 mA	For availability by type, refer to Table 1 below				
Densitivity	0375	375 mA	For availability by type, refer to Table 1 below				
	0500	500 mA					
	1000	1000 mA					
	2000	2000 mA					
	5000	5000 mA					
	Code	Description	Comments				
	110	110 Vac					
Group 3:	220	220 Vac	EL305				
Voltage	380	380 Vac	LE303				
	525	525 Vac					
	000	110 - 525 Vac	EL306				
	Code	Description	Comments				
	-	Not applicable					
Group 4:	3	3" Remote CT					
Remote CT	4	4" Remote CT	For remote CT availability, refer to table 1				
	6	6" Remote CT	For femote CT availability, feler to table 1				
	8	8" Remote CT					
Group 5:	Code	Description	Comments				
Remote Test	-	Not applicable					
Button	Т	Remote test button					

Table 1: Available Configurations

	Available configurations for sensitivity and CTs									
Sensitivity	EL305				EL306					
4	Integrated	Remote CT			Into motord	Remote CT				
mA		3	4	6	8	Integrated	3	4	6	8
30	•									
50	•									
125	•									
250	•	•	•							
375						•	•	•		
500	•	•	•	•	•	•	•	•		
1000	•	•	•	•	•	•	•	•	•	
2000	•	•	•	•	•	•	•	•	•	•
5000	•	•	•	•	•	•	•	•	•	•



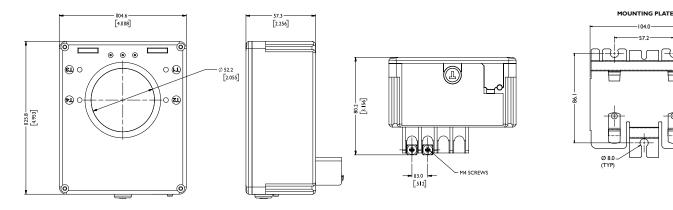
Application Information



Note:

- 1. The size and number of conductors will determine whether to use a remote CT
- The EL305 / EL306 relay and remote CT must be a matching pair (factory calibrated)
- 3. The supply voltage of the EL305 units must be specified at the time of ordering
- 4. The maximum load for the shunt trip circuit is 550 VA
- Voltage dips of up to 40% have no effect on the sensitivity
- 7. The EL305 relay is an instantaneous type
- 8. The EL306 is a time delay type

Outline Dimensions



© 2016.09 CBI (Pty) Ltd. All Rights

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

INDIA

CBI-electric: Asia

A1, Pushpagiri Residency, 1st Cross 2nd Main, Jyothi Nagar, B.G Road Bengaluru 560083, India Tel: +91-9880553153

Email: salesasia@cbi-electric.com Website: www.cbibreakers.com Website: www.cbi-lowvoltage.com

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.cbibreakers.com

Website: www.cbi-lowvoltage.com

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

Data Sheet Page 4 of 4 **EL305/6-SERIES-DAT** REV. B **AUGUST 2022** 2208004

A member of the REUNERT Group