

**STATEMENT OF CONFORMITY**

Ref.No. SE-514582

Product:	Cable Distribution Cabinet
Tested by request of:	ABB Kabeldon Box 531 SE-441 15 Alingsås Sweden
Manufactured at:	ABB Kabeldon Sävelundsgatan 2 SE-441 38 Alingsås Sweden
Rating and principal characteristics:	CDCM 420: 400 A, 400 V~, 30 kA 0.2 s, IP 34D CDCM 440: 400 A, 400 V~, 30 kA 0.2 s, IP 34D CDCM 640: 630 A, 400 V~, 23 kA 1 s, IP 34D
Trade mark (if any):	<b>ABB</b> ABB Kabeldon
Model/Type Ref:	CDCM 420/ 2CGX0 6330 0430 CDCM 440/ 2CGX0 6330 0609 CDCM 640/ 2CGX0 6330 0610
Additional information (if any):	Tested by Intertek Semko AB SMTA - ABB Kabeldon See also Test Report page 1-3
A sample of the product has been tested and found to be in conformity with:	IEC/EN 60439-5:1999 (1.1 Edition) and IEC/EN 60439-1:1999 + A1:2004
As shown in the Test Report (ref.no):	514582



Stockholm



Date: 05 October 2005

Internal ref: Pär Iggström

**Intertek Semko AB**

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**TEST REPORT**  
**IEC 60 439-5 and/or EN 60 439-5**

**Low-voltage switchgear and controlgear assemblies**

**Part 5: Particular requirements for assemblies intended to be installed outdoors in public places – Cable distribution cabinets (CDCs) for power distribution in networks**

Report Reference No. ....: 514582

Tested by (name+signature).....: Bertil T Larsson

Witnessed by (name+signature).....:

Supervised by (name+signature).....: Claes Söderström

Approved by (name+signature) .....: Pär Iggström

Date of issue .....: 2005-09-29

*Bertil Larsson*  
*Claes Söderström*  
*Pär Iggström*

CB Testing Laboratory .....: Intertek Semko AB

Address .....: Torshamnsgatan 43, 164 22 Kista

Testing location/ procedure .....: CBTL  RMT  SMT  WMT  TMP

Testing location/ address .....: ABB Kabeldon (The Laboratory)

Sävelundsgatan 2, SE-441 38 Alingsås, Sweden

Applicant's name .....: ABB Kabeldon

Address .....: Box 531, SE-441 15 Alingsås, Sweden

**Test specification:**

Standard .....: IEC/EN 60439-5:1999 (1.1 Edition) and/or IEC/EN 60439-1:1999 + A1:2004

Test procedure.....: CB / CCA scheme

Non-standard test method.....: N/A

Test Report Form No. ....: IECEN60439\_5A

TRF Originator .....: SGS Fimko Ltd

Master TRF .....: 2005-07

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Test item description.....: Cable Distribution Cabinet with upper part (CDCM)

Trade Mark .....: ABB Kabeldon

Manufacturer.....: ABB Kabeldon

Model/Type reference .....: CDCM 420/ 2CGX0 6330 0430, CDCM 440/ 2CGX0 6330 0609, CDCM 640/ 2CGX0 6330 0610

Ratings.....: CDCM 420 and 440: 400 A, 400 V~, 30 kA 0.2 s, IP 34D

CDCM 640: 630 A, 400 V~, 23 kA 1 s, IP 34D



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## Copy of marking plates



## Summary of testing:

A partial test has been done on the Cable Distribution Cabinets CDCM 420 and CDCM 440/640 at the laboratory at ABB Kabeldon. These cabinets are basically the same as CDC 420 and 440/640, that previously have been tested and approved by SEMKO (Reference No:301938, issued on the 12<sup>th</sup> of February 2003).

The difference is the upper section, suitable for equipment for kWh metering and other similar equipment. All tests are not performed as they are already done on the standard CDC.

Photos have been provided, separately from this report.

The tests done on this occasion are the following:

“Verification of resistance to static load” (8.2.9.1.1 Test 2)

“Verification of resistance to torsional stress” (8.2.9.1.3)

Verification of degree of protection provided by the IP Code (IEC 60529 13.3, 14.2.4 and 15.3). An additional dielectric test according to IEC 60439-1 8.2.7 has been performed.

<b>Test item particulars</b> .....	Cable Distribution Cabinet with upper part (CDCM)
Place of installation .....	outdoor
Service conditions .....	normal / special
IP Code .....	IP 34D
.....	:
.....	:
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object .....	N/A
- test object does meet the requirement.....	P(Pass)
- test object does not meet the requirement.....	F(Fail)
<b>Testing</b> .....	
Date of receipt of test item .....	2005-09-12
Date (s) of performance of tests.....	2005-09-14 – 2005-09-23
<b>General remarks:</b>	
<p><b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IEC 60439-1.</b></p> <p>The test results presented in this report relate only to the object tested.                  This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p> <p>"(see Enclosure #)" refers to additional information appended to the report.                  "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a comma (point) is used as the decimal separator.</p>	
<b>General product information:</b>	
<p>Enclosure series CDC/M are made of hot-dip galvanized sheet steel and are built to standards IEC 60439-1 and IEC 60439-5. The CDCM cabinets are the same as CDC but are fitted with an upper section, which can be locked separately. The degree of protection is IP 34D in accordance to IEC 60439-5 and also with the requirements for use in arctic climate. The cabinets are normally provided with busbar system, rated current 400 or 630 amps. The sides have a bracket to attach a snow marking pole or an accessory cabinet. The difference between a CDCM 420 and a CDCM 440 is the width, 350 and 600 mm, respectively. The CDCM 640 has the same measurements as 440, with a 630 A busbar system.</p>	

IEC 60439-5 and/or EN 60439-5			
Clause	Requirement + Test	Result - Remark	Verdict
5	INFORMATION TO BE GIVEN REGARDING THE ASSEMBLY		
5.1	Nameplates		
	on the nameplate(s) shall be given:		
	a) manufacturers name.....:	ABB Kabeldon	P
	b) identification / type reference .....	CDCM 420 / 440 / 640	P
	on the nameplate or in the relevant documentation shall be given:		
	c) standard IEC/EN 60439-5 .....	IEC 60439-5	P
	f...q) information.....:		N/A
	r) rated current (clause 4.9) .....	400 A / 630 A	P

6	SERVICE CONDITIONS		
6.1	Normal service conditions		P
6.2	Special service conditions		
6.2.11	Where heavy snowfalls and snowdrift occur, arctic climate can be considered a normal condition; however, the lower temperature limit of -25°C may be applied		P

7	DESIGN AND CONSTRUCTION		
7.1	Mechanical design		N/A
7.1.1	General		N/A
7.1.3	Terminals for external conductors		N/A
7.2	Enclosure and degree of protection		
7.2.1.3	Enclosure of CDC at least IP34D	IP 34D, tested according to IEC 60529. Additional dielectric test 3.5 kV according to IEC 60439-1 8.2.7	P
7.4	Protection against electric shock		N/A
7.6	Switching devices and components installed in ASSEMBLIES		N/A

8	TEST SPECIFICATIONS		
8.2	Type tests		
8.2.3	Verification of short-circuit withstand strength		N/A
8.2.9	Verification of mechanical strength		
	Test temperature 10...40 °C	20°C	P
	a new sample CDC may be used for each of the independent tests.		N/A

	If same sample CDC used for more than one test, compliance check for second numeral of IP only applied when the tests on that sample completed		P
	CDC fixed at its normal ground level		P
	door(s) of the CDC locked at the commencement of test and remain locked for the duration of test		P
8.2.9.1	Verification of structural strength		
8.2.9.1.1	Verification of resistance to static load		
	a) following tests on all types of CDC except the wall-mounted recessed type		
	Test 1 – load of 8500 N/m <sup>2</sup> ; for 5 min to the roof of the enclosure	m <sup>2</sup> ; load N	N/A
	Test 2 – force 1200 N; for 5 min in turn to the front and back upper edges of the roof of the enclosure	Force 1200 N for 5 min.	P
	b) wall- mounted recessed type of CDC		
	load 60 N; for 5 min to each sidewall of the enclosure in turn.		N/A
	Compliance for a) and b) is checked by verification		
	degree of protection remains IP34D	Tested with access probe	P
	operation of door(s) and locking points not impaired	OK	P
	electrical clearances remained satisfactory	OK	P
	CDC having metallic enclosure, no contact between live parts and the enclosure	OK	P
8.2.9.1.2	Verification of resistance to shock load		N/A
8.2.9.1.3	Verification of resistance to torsional stress		P
	Ground-mounted types of CDCs		
	horizontally rotatable frame, 60 mmx60mmx5 mm	60 mm x 60 mm x 5 mm	P
	CDC with door(s) closed, torsional force 2x1000 N applied for 30 s as shown in figure 5	Torsional force 2x1000 N applied for 30 s	P
	the door(s) remain closed	OK	P
	degree of protection remains IP34D	Tested with access probe	P
8.2.9.2	Verification of impact force withstand		N/A
8.2.9.3	Verification of mechanical strength of doors		N/A
8.2.9.4	Verification of resistance to axial load of metal inserts in synthetic material		N/A
8.2.9.5	Verification of resistance to mechanical shock impacts induced by sharp-edged objects		N/A
8.2.9.6	Test of mechanical strength of the base		N/A
8.2.10	Verification of resistance to abnormal heat and flame		N/A
8.2.11	Verification of corrosion and ageing resistance		N/A



514582 (CDCM 420, 440, 640, 2005-10-04)



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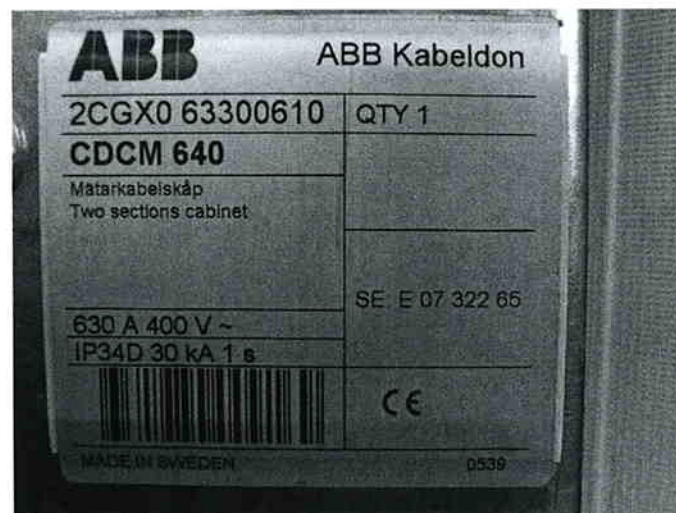
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