

Sensor solutions for Gas-Insulated Switchgear (RMU) equipped with NEXANS separable connectors

Product overview

Sensors based on advanced measurement principles have been developed as alternative solution to conventional instrument transformers in order to achieve significant reduction in dimensions, increase of safety and to provide greater rating standardization with a wider functionality range. Due to their compact sizes and optimized designs sensors represent ideal solutions for new installations as well as retrofit purposes of existing switchgear. Sensors provide state of the art solution for current and voltage measurement also in applications where is very difficult to use conventional instrument transformers. ABB offers wide range of sensor products suitable for use in secondary Gas-Insulated Switchgear (RMU - Ring Main Units).



Indoor Current Sensor KECA 80 C85

The current sensor (Electronic current transformers according to IEC 60044-8 and low-power passive current transformers according to IEC 61869-10 standards) type KECA 80 C85 is intended for current measurement in gas insulated medium voltage switchgear. The design of the current sensor has been optimized to be easily assembled on the shielded cable connectors and therefore makes the sensor suitable for retrofit purposes.

Ratings:

- Rated primary current of application: up to 4 000 A
- Rated primary current: 80 A
- Cable lengths: 2.2; 3.4; 3.6; 5 m
- Inner diameter: 85 mm



Indoor Current Sensor KECA 80 D85 (split core type)

The current sensor (Electronic current transformers according to IEC 60044-8 and low-power passive current transformers according to IEC 61869-10 standards) type KECA 80 D85 is intended for current measurement in gas insulated medium voltage switchgear. The current sensor is the split core type equipped with a clamping system which provides easy and fast installation and therefore makes the sensor suitable for retrofit purposes.

Ratings:

- Rated primary current of application: up to 4 000 A
- Rated primary current: 80 A
- Cable length: 5 m
- Inner diameter: up to 85 mm



Indoor Voltage Sensors KEVA C

The voltage sensor (Electronic voltage transformers according to IEC 60044-7 and low-power passive voltage transformers according to IEC 61869-11 standards) type KEVA C is intended for voltage measurement in gas insulated medium voltage switchgear. The voltage sensor KEVA C has been designed as easy replacement of originally used insulating plugs in the cable connectors. Voltage sensors KEVA C are compatible with cable connectors from Nexans (Euromold). Two variants of secondary output are available, ratio 10 000:1 with one defined primary rating and secondary output 3.25√3 V for three defined primary ratings.

Ratings:

- Rated primary voltage of application: up to 40.5 kV
- Highest voltage for equipment: up to 40.5 kV
- Rated primary voltage for secondary ratio 10 000:1: 22/√3 kV; 33/√3 kV and 38/√3 kV
- Rated primary voltage for output secondary 3.25√3 V: 10/√3 kV; 15/√3 kV; 20/√3 kV; 33/√3 kV; 35/√3 kV and 38/√3 kV
- Cable lengths: 2.2 m, 5 m.

Current sensors

Measure- ment	Sensor type	Supported type of cable connector		Cable length	Sensor ordering code	
		Manufacturer	Type		IEC 60044-8	IEC 61869-10
Current sensor	KECA 80 C85	All types of screened separable connectors		2.2 m	1VL5400056V0101	1VL5400056V1101
				3.6 m	1VL5400056V0102	1VL5400056V1102
				3.4 m	1VL5400056V0103	1VL5400056V1103
				5 m	1VL5400056V0104	1VL5400056V1104
Current sensor	KECA 80 D85	All shielded cables		5 m	1VL5400076V0101	1VL5400076V1101

Voltage sensors with transforamtion ratio 1:10 000 and RJ45 termination compatible with IEDs in Tab. 1. group 1

Measure- ment	Sensor type	Supported type of cable connector	Cable length	Sensor ordering code	
		Type		IEC 60044-7	IEC 61869-11
Voltage sensor	KEVA 24 C10	400 TB/G; 440 TB/G; K400 TB/G; K440 TB/G; 400PB-xSA	2.2 m	1VL5400061V0101	1VL5400061V1101
			5 m	1VL5400061V0103	1VL5400061V1103
	KEVA 24 C10c		2.2 m	1VL5400061V0201	1VL5400061V1201
			5 m	1VL5400061V0203	1VL5400061V1203
Voltage sensor	KEVA 24 C24	430 TB - 630A; K430 TB - 630A; 300 PB - 630A;	2.2 m	1VL5400078V0101	1VL5400078V1101
			5 m	1VL5400078V0103	1VL5400078V1103
	KEVA 24 C24c	K300 PB - 630A	2.2 m	1VL5400078V0201	1VL5400078V1201
			5 m	1VL5400078V0203	1VL5400078V1203
Voltage sensor	KEVA 24 C2 4.1	(K)480 TB/G; (K)484 TB/G; (K)489 TB/G; (K)800 PB/G;	2.2 m	-	1VL5400084V1101
			5 m	-	1VL5400084V1103
	KEVA 24 C2 4.1c	(K)809 PB/G; (K)480 BE/G; 800 SA-10xN (X up to 24)	2.2 m	-	1VL5400084V1201
			5 m	-	1VL5400084V1203
Voltage sensor	KEVA 36 C2 4.1	M480 TB/G; M800 PB/G; M484 TB/G; M804 PB/G; M489 TB/G; M809 PB/G;	2.2 m	-	1VL5400085V0101
			5 m	-	1VL5400085V0103
	KEVA 36 C2 4.1c	800 SA-10-xN (x=30,33,36) M480 BE/G	2.2 m	-	1VL5400085V0201
			5m	-	1VL5400085V0203
Voltage sensor	KEVA 40.5 C2 4.1	P480 TB/G; P800 PB/G; P484 TB/G; P804 PB/G; P489 TB/G; P809 PB/G;	2.2 m	-	1VL5400133V1101
			5 m	-	1VL5400133V1103
	KEVA 40.5 C2 4.1c	800 SA-10-xN (x=30,33,36) P480 BE/G	2.2 m	-	1VL5400133V1201
			5m	-	1VL5400133V1203

Voltage sensors with 3.25V rated output signal and RJ45 termination compatible with IEDs in Tab. 1. group 2

Sensor type designation	Ratio	Burden	Secondary cable length			
			2.2 m	5 m	8 m	9.9 m
KEVA 24 C10	20/√3 kV	2 MΩ/50 pF	1VL5400090V1101	1VL5400090V1103	1VL5400090V1104	1VL5400090V1102
		200 kΩ/350 pF	1VL5400091V1101	1VL5400091V1103	1VL5400091V1104	1VL5400091V1102
	15/√3 kV	2 MΩ/50 pF	1VL5400092V1101	1VL5400092V1103	1VL5400092V1104	1VL5400092V1102
		200 kΩ/350 pF	1VL5400093V1101	1VL5400093V1103	1VL5400093V1104	1VL5400093V1102
	10/√3 kV	2 MΩ/50 pF	1VL5400094V1101	1VL5400094V1103	1VL5400094V1104	1VL5400094V1102
		200 kΩ/350 pF	1VL5400095V1101	1VL5400095V1103	1VL5400095V1104	1VL5400095V1102
Supported type of cable connector			K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C10c	20/√3 kV	2 MΩ/50 pF	1VL5400090V1201	1VL5400090V1203	1VL5400090V1204	1VL5400090V1202
		200 kΩ/350 pF	1VL5400091V1201	1VL5400091V1203	1VL5400091V1204	1VL5400091V1202
	15/√3 kV	2 MΩ/50 pF	1VL5400092V1201	1VL5400092V1203	1VL5400092V1204	1VL5400092V1202
		200 kΩ/350 pF	1VL5400093V1201	1VL5400093V1203	1VL5400093V1204	1VL5400093V1202
	10/√3 kV	2 MΩ/50 pF	1VL5400094V1201	1VL5400094V1203	1VL5400094V1204	1VL5400094V1202
		200 kΩ/350 pF	1VL5400095V1201	1VL5400095V1203	1VL5400095V1204	1VL5400095V1202
Supported type of cable connector			K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C11	20/√3 kV	2 MΩ/50 pF	1VL5400160V1101	1VL5400160V1103	1VL5400160V1104	1VL5400160V1102
		200 kΩ/350 pF	1VL5400161V1101	1VL5400161V1103	1VL5400161V1104	1VL5400161V1102
	15/√3 kV	2 MΩ/50 pF	1VL5400162V1101	1VL5400162V1103	1VL5400162V1104	1VL5400162V1102
		200 kΩ/350 pF	1VL5400163V1101	1VL5400163V1103	1VL5400163V1104	1VL5400163V1102
	10/√3 kV	2 MΩ/50 pF	1VL5400164V1101	1VL5400164V1103	1VL5400164V1104	1VL5400164V1102
		200 kΩ/350 pF	1VL5400165V1101	1VL5400165V1103	1VL5400165V1104	1VL5400165V1102
Supported type of cable connector			K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			

Sensor type designation	Ratio	Burden	Secondary cable length			
			2.2 m	5 m	8 m	9.9 m
KEVA 24 C11c	20/√3 kV	2 MΩ/50 pF	1VL5400160V1201	1VL5400160V1203	1VL5400160V1204	1VL5400160V1202
		200 kΩ/350 pF	1VL5400161V1201	1VL5400161V1203	1VL5400161V1204	1VL5400161V1202
	15/√3 kV	2 MΩ/50 pF	1VL5400162V1201	1VL5400162V1203	1VL5400162V1204	1VL5400162V1202
		200 kΩ/350 pF	1VL5400163V1201	1VL5400163V1203	1VL5400163V1204	1VL5400163V1202
	10/√3 kV	2 MΩ/50 pF	1VL5400164V1201	1VL5400164V1203	1VL5400164V1204	1VL5400164V1202
		200 kΩ/350 pF	1VL5400165V1201	1VL5400165V1203	1VL5400165V1204	1VL5400165V1202
Supported type of cable connector			K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C24	20/√3 kV	2 MΩ/50 pF	1VL5400114V1101	1VL5400114V1103	1VL5400114V1104	1VL5400114V1102
		200 kΩ/350 pF	1VL5400115V1101	1VL5400115V1103	1VL5400115V1104	1VL5400115V1102
	15/√3 kV	2 MΩ/50 pF	1VL5400116V1101	1VL5400116V1103	1VL5400116V1104	1VL5400116V1102
		200 kΩ/350 pF	1VL5400117V1101	1VL5400117V1103	1VL5400117V1104	1VL5400117V1102
	10/√3 kV	2 MΩ/50 pF	1VL5400118V1101	1VL5400118V1103	1VL5400118V1104	1VL5400118V1102
		200 kΩ/350 pF	1VL5400119V1101	1VL5400119V1103	1VL5400119V1104	1VL5400119V1102
Supported type of cable connector			K430 TB; K300 PBM/G-630 A; 300 SA-10-xN (x = up to 24 kV)			
KEVA 24 C24c	20/√3 kV	2 MΩ/50 pF	1VL5400114V1201	1VL5400114V1203	1VL5400114V1204	1VL5400114V1202
		200 kΩ/350 pF	1VL5400115V1201	1VL5400115V1203	1VL5400115V1204	1VL5400115V1202
	15/√3 kV	2 MΩ/50 pF	1VL5400116V1201	1VL5400116V1203	1VL5400116V1204	1VL5400116V1202
		200 kΩ/350 pF	1VL5400117V1201	1VL5400117V1203	1VL5400117V1204	1VL5400117V1202
	10/√3 kV	2 MΩ/50 pF	1VL5400118V1201	1VL5400118V1203	1VL5400118V1204	1VL5400118V1202
		200 kΩ/350 pF	1VL5400119V1201	1VL5400119V1203	1VL5400119V1204	1VL5400119V1202
Supported type of cable connector			K430 TB; K300 PBM/G-630 A; 300 SA-10-xN (x = up to 24 kV)			
KEVA 24 C2 4.1	20/√3 kV	2 MΩ/50 pF	1VL5400141V1101	1VL5400141V1103	1VL5400141V1104	1VL5400141V1102
		200 kΩ/350 pF	1VL5400142V1101	1VL5400142V1103	1VL5400142V1104	1VL5400142V1102
	15/√3 kV	2 MΩ/50 pF	1VL5400139V1101	1VL5400139V1103	1VL5400139V1104	1VL5400139V1102
		200 kΩ/350 pF	1VL5400140V1101	1VL5400140V1103	1VL5400140V1104	1VL5400140V1102
	10/√3 kV	2 MΩ/50 pF	1VL5400137V1101	1VL5400137V1103	1VL5400137V1104	1VL5400137V1102
		200 kΩ/350 pF	1VL5400138V1101	1VL5400138V1103	1VL5400138V1104	1VL5400138V1102
Supported type of cable connector			K480 TB/G; K484 TB/G; K489 TB/G; K800 PB/G; K804 PB/G; K809 PB/G; K480 BE/G; 800 SA-10-xN (x = up to 24 kV); KAA8			
KEVA 24 C2 4.1c	20/√3 kV	2 MΩ/50 pF	1VL5400141V1201	1VL5400141V1203	1VL5400141V1204	1VL5400141V1202
		200 kΩ/350 pF	1VL5400142V1201	1VL5400142V1203	1VL5400142V1204	1VL5400142V1202
	15/√3 kV	2 MΩ/50 pF	1VL5400139V1201	1VL5400139V1203	1VL5400139V1204	1VL5400139V1202
		200 kΩ/350 pF	1VL5400140V1201	1VL5400140V1203	1VL5400140V1204	1VL5400140V1202
	10/√3 kV	2 MΩ/50 pF	1VL5400137V1201	1VL5400137V1203	1VL5400137V1204	1VL5400137V1202
		200 kΩ/350 pF	1VL5400138V1201	1VL5400138V1203	1VL5400138V1204	1VL5400138V1202
Supported type of cable connector			K480 TB/G; K484 TB/G; K489 TB/G; K800 PB/G; K804 PB/G; K809 PB/G; K480 BE/G; 800 SA-10-xN (x = up to 24 kV); KAA8			
KEVA 36 C2 4.1	30/√3 kV	2 MΩ/50 pF	1VL5400143V1101	1VL5400143V1103	1VL5400143V1104	1VL5400143V1102
		200 kΩ/350 pF	1VL5400144V1101	1VL5400144V1103	1VL5400144V1104	1VL5400144V1102
	33/√3 kV	2 MΩ/50 pF	1VL5400145V1101	1VL5400145V1103	1VL5400145V1104	1VL5400145V1102
		200 kΩ/350 pF	1VL5400146V1101	1VL5400146V1103	1VL5400146V1104	1VL5400146V1102
Supported type of cable connector			M480 TB/G; M800 PB/G; M484 TB/G; M804 PB/G; M489 TB/G; M809 PB/G; 800 SA-10-xN (x=30,33,36); M480 BE/G			
KEVA 36 C2 4.1c	30/√3 kV	2 MΩ/50 pF	1VL5400143V1201	1VL5400143V1203	1VL5400143V1204	1VL5400143V1202
		200 kΩ/350 pF	1VL5400144V1201	1VL5400144V1203	1VL5400144V1204	1VL5400144V1202
	33/√3 kV	2 MΩ/50 pF	1VL5400145V1201	1VL5400145V1203	1VL5400145V1204	1VL5400145V1202
		200 kΩ/350 pF	1VL5400146V1201	1VL5400146V1203	1VL5400146V1204	1VL5400146V1202
Supported type of cable connector			M480 TB/G; M800 PB/G; M484 TB/G; M804 PB/G; M489 TB/G; M809 PB/G; 800 SA-10-xN (x=30,33,36); M480 BE/G			
KEVA 40.5 C2 4.1	35/√3 kV	2 MΩ/50 pF	1VL5400153V1101	1VL5400153V1103	1VL5400153V1104	1VL5400153V1102
		200 kΩ/350 pF	1VL5400154V1101	1VL5400154V1103	1VL5400154V1104	1VL5400154V1102
	38/√3 kV	2 MΩ/50 pF	1VL5400155V1101	1VL5400155V1103	1VL5400155V1104	1VL5400155V1102
		200 kΩ/350 pF	1VL5400156V1101	1VL5400156V1103	1VL5400156V1104	1VL5400156V1102
Supported type of cable connector			P480 TB/G; P484 TB/G; P489 TB/G; P800 PB/G; P804 PB/G; P809 PB/G; 800 SA-10-xN (x=30,33,36); P480 BE/G			
KEVA 40.5 C2 4.1c	35/√3 kV	2 MΩ/50 pF	1VL5400153V1201	1VL5400153V1203	1VL5400153V1204	1VL5400153V1202
		200 kΩ/350 pF	1VL5400154V1201	1VL5400154V1203	1VL5400154V1204	1VL5400154V1202
	38/√3 kV	2 MΩ/50 pF	1VL5400155V1201	1VL5400155V1203	1VL5400155V1204	1VL5400155V1202
		200 kΩ/350 pF	1VL5400156V1201	1VL5400156V1203	1VL5400156V1204	1VL5400156V1202
Supported type of cable connector			P480 TB/G; P484 TB/G; P489 TB/G; P800 PB/G; P804 PB/G; P809 PB/G; 800 SA-10-xN (x=30,33,36); P480 BE/G			

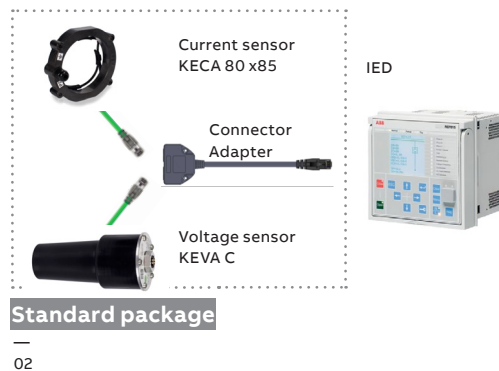
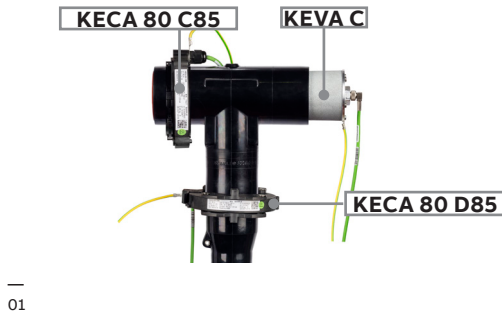
Voltage sensors with 3.25V rated output signal and ferrule termination compatible with IEDs
in Tab. 1. group 3

Sensor type designation	Ratio	Burden	Secondary cable length		
			2.2 m	5 m	8 m
KEVA 24 C10	20/√3 kV	2 MΩ/50 pF	1VL5400090V1107	1VL5400090V1105	1VL5400090V1106
		200 kΩ/350 pF	1VL5400091V1107	1VL5400091V1105	1VL5400091V1106
	15/√3 kV	2 MΩ/50 pF	1VL5400092V1107	1VL5400092V1105	1VL5400092V1106
		200 kΩ/350 pF	1VL5400093V1107	1VL5400093V1105	1VL5400093V1106
	10/√3 kV	2 MΩ/50 pF	1VL5400094V1107	1VL5400094V1105	1VL5400094V1106
		200 kΩ/350 pF	1VL5400095V1107	1VL5400095V1105	1VL5400095V1106
Supported type of cable connector		K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C10c	20/√3 kV	2 MΩ/50 pF	1VL5400090V1207	1VL5400090V1205	1VL5400090V1206
		200 kΩ/350 pF	1VL5400091V1207	1VL5400091V1205	1VL5400091V1206
	15/√3 kV	2 MΩ/50 pF	1VL5400092V1207	1VL5400092V1205	1VL5400092V1206
		200 kΩ/350 pF	1VL5400093V1207	1VL5400093V1205	1VL5400093V1206
	10/√3 kV	2 MΩ/50 pF	1VL5400094V1207	1VL5400094V1205	1VL5400094V1206
		200 kΩ/350 pF	1VL5400095V1207	1VL5400095V1205	1VL5400095V1206
Supported type of cable connector		K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C11	20/√3 kV	2 MΩ/50 pF	1VL5400160V1107	1VL5400160V1105	1VL5400160V1106
		200 kΩ/350 pF	1VL5400161V1107	1VL5400161V1105	1VL5400161V1106
	15/√3 kV	2 MΩ/50 pF	1VL5400162V1107	1VL5400162V1105	1VL5400162V1106
		200 kΩ/350 pF	1VL5400163V1107	1VL5400163V1105	1VL5400163V1106
	10/√3 kV	2 MΩ/50 pF	1VL5400164V1107	1VL5400164V1105	1VL5400164V1106
		200 kΩ/350 pF	1VL5400165V1107	1VL5400165V1105	1VL5400165V1106
Supported type of cable connector		K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C11c	20/√3 kV	2 MΩ/50 pF	1VL5400160V1207	1VL5400160V1205	1VL5400160V1206
		200 kΩ/350 pF	1VL5400161V1207	1VL5400161V1205	1VL5400161V1206
	15/√3 kV	2 MΩ/50 pF	1VL5400162V1207	1VL5400162V1205	1VL5400162V1206
		200 kΩ/350 pF	1VL5400163V1207	1VL5400163V1205	1VL5400163V1206
	10/√3 kV	2 MΩ/50 pF	1VL5400164V1207	1VL5400164V1205	1VL5400164V1206
		200 kΩ/350 pF	1VL5400165V1207	1VL5400165V1205	1VL5400165V1206
Supported type of cable connector		K400 TB/G; K440 TB/G; K944 TB/G; K400 TE/G; K400 BE/G-E; KAA4; 400PB-xSA (x = up to 24 kV)			
KEVA 24 C24	20/√3 kV	2 MΩ/50 pF	1VL5400114V1107	1VL5400114V1105	1VL5400114V1106
		200 kΩ/350 pF	1VL5400115V1107	1VL5400115V1105	1VL5400115V1106
	15/√3 kV	2 MΩ/50 pF	1VL5400116V1107	1VL5400116V1105	1VL5400116V1106
		200 kΩ/350 pF	1VL5400117V1107	1VL5400117V1105	1VL5400117V1106
	10/√3 kV	2 MΩ/50 pF	1VL5400118V1107	1VL5400118V1105	1VL5400118V1106
		200 kΩ/350 pF	1VL5400119V1107	1VL5400119V1105	1VL5400119V1106
Supported type of cable connector		K430 TB; K300 PBM/G-630 A; 300 SA-10-xN (x = up to 24 kV)			
KEVA 24 C24c	20/√3 kV	2 MΩ/50 pF	1VL5400114V1207	1VL5400114V1205	1VL5400114V1206
		200 kΩ/350 pF	1VL5400115V1207	1VL5400115V1205	1VL5400115V1206
	15/√3 kV	2 MΩ/50 pF	1VL5400116V1207	1VL5400116V1205	1VL5400116V1206
		200 kΩ/350 pF	1VL5400117V1207	1VL5400117V1205	1VL5400117V1206
	10/√3 kV	2 MΩ/50 pF	1VL5400118V1207	1VL5400118V1205	1VL5400118V1206
		200 kΩ/350 pF	1VL5400119V1207	1VL5400119V1205	1VL5400119V1206
Supported type of cable connector		K430 TB; K300 PBM/G-630 A; 300 SA-10-xN (x = up to 24 kV)			
KEVA 24 C2 4.1	20/√3 kV	2 MΩ/50 pF	1VL5400141V1107	1VL5400141V1105	1VL5400141V1106
		200 kΩ/350 pF	1VL5400142V1107	1VL5400142V1105	1VL5400142V1106
	15/√3 kV	2 MΩ/50 pF	1VL5400139V1107	1VL5400139V1105	1VL5400139V1106
		200 kΩ/350 pF	1VL5400140V1107	1VL5400140V1105	1VL5400140V1106
	10/√3 kV	2 MΩ/50 pF	1VL5400137V1107	1VL5400137V1105	1VL5400137V1106
		200 kΩ/350 pF	1VL5400138V1107	1VL5400138V1105	1VL5400138V1106
Supported type of cable connector		K480 TB/G; K484 TB/G; K489 TB/G; K800 PB/G; K804 PB/G; K809 PB/G; K480 BE/G; 800 SA-10-xN (x = up to 24 kV); KAA8			
KEVA 24 C2 4.1c	20/√3 kV	2 MΩ/50 pF	1VL5400141V1207	1VL5400141V1205	1VL5400141V1206
		200 kΩ/350 pF	1VL5400142V1207	1VL5400142V1205	1VL5400142V1206
	15/√3 kV	2 MΩ/50 pF	1VL5400139V1207	1VL5400139V1205	1VL5400139V1206
		200 kΩ/350 pF	1VL5400140V1207	1VL5400140V1205	1VL5400140V1206
	10/√3 kV	2 MΩ/50 pF	1VL5400137V1207	1VL5400137V1205	1VL5400137V1206
		200 kΩ/350 pF	1VL5400138V1207	1VL5400138V1205	1VL5400138V1206
Supported type of cable connector		K480 TB/G; K484 TB/G; K489 TB/G; K800 PB/G; K804 PB/G; K809 PB/G; K480 BE/G; 800 SA-10-xN (x = up to 24 kV); KAA8			

Sensor type designation	Ratio	Burden	Secondary cable length		
			2.2 m	5 m	8 m
KEVA 36 C2 4.1	30/√3 kV	2 MΩ/50 pF	1VL5400143V1107	1VL5400143V1105	1VL5400143V1106
		200 kΩ/350 pF	1VL5400144V1107	1VL5400144V1105	1VL5400144V1106
	33/√3 kV	2 MΩ/50 pF	1VL5400145V1107	1VL5400145V1105	1VL5400145V1106
		200 kΩ/350 pF	1VL5400146V1107	1VL5400146V1105	1VL5400146V1106
Supported type of cable connector		M480 TB/G; M800 PB/G; M484 TB/G; M804 PB/G; M489 TB/G; M809 PB/G; 800 SA-10-xN (x=30,33,36); M480 BE/G			
KEVA 36 C2 4.1c	30/√3 kV	2 MΩ/50 pF	1VL5400143V1207	1VL5400143V1205	1VL5400143V1206
		200 kΩ/350 pF	1VL5400144V1207	1VL5400144V1205	1VL5400144V1206
	33/√3 kV	2 MΩ/50 pF	1VL5400145V1207	1VL5400145V1205	1VL5400145V1206
		200 kΩ/350 pF	1VL5400146V1207	1VL5400146V1205	1VL5400146V1206
Supported type of cable connector		M480 TB/G; M800 PB/G; M484 TB/G; M804 PB/G; M489 TB/G; M809 PB/G; 800 SA-10-xN (x=30,33,36); M480 BE/G			
KEVA 40.5 C2 4.1	35/√3 kV	2 MΩ/50 pF	1VL5400153V1107	1VL5400153V1105	1VL5400153V1106
		200 kΩ/350 pF	1VL5400154V1107	1VL5400154V1105	1VL5400154V1106
	38/√3 kV	2 MΩ/50 pF	1VL5400155V1107	1VL5400155V1105	1VL5400155V1106
		200 kΩ/350 pF	1VL5400156V1107	1VL5400156V1105	1VL5400156V1106
Supported type of cable connector		P480 TB/G; P484 TB/G; P489 TB/G; P800 PB/G; P804 PB/G; P809 PB/G; 800 SA-10-xN (x=30,33,36); P480 BE/G			
KEVA 40.5 C2 4.1c	35/√3 kV	2 MΩ/50 pF	1VL5400153V1207	1VL5400153V1205	1VL5400153V1206
		200 kΩ/350 pF	1VL5400154V1207	1VL5400154V1205	1VL5400154V1206
	38/√3 kV	2 MΩ/50 pF	1VL5400155V1207	1VL5400155V1205	1VL5400155V1206
		200 kΩ/350 pF	1VL5400156V1207	1VL5400156V1205	1VL5400156V1206
Supported type of cable connector		P480 TB/G; P484 TB/G; P489 TB/G; P800 PB/G; P804 PB/G; P809 PB/G; 800 SA-10-xN (x=30,33,36); P480 BE/G			

01 Assembly of sensors on cable connector

02 Sensor connection to IED (Intelligent Electronic Device)



Sensor assembly

Current sensor KECA 80 C85 shall be installed on shielded head of cable connector using clamping system.

Current sensor KECA 80 D85 shall be installed on shielded cable using clamping system which allows assembly on different diameters of MV cable. Voltage sensors KEVA C are assembled as easy replacement of originally used insulating plugs in cable connectors.

Standard package

Standard package for 3-phase application where current and voltage measurements are required consists of:

- 3 pcs of current sensors KECA 80 C85 or KECA 80 D85
- 3 pcs of voltage sensors KEVA C
- 3 pcs of connector adapter AR4 (ordering code for connector adapter AR4 is 1VL5300752R0101)

Group	Compatible IEDs
1	Protection relays: ABB Relion 605, 615, 620, 640 series Schweitzer Engineering Laboratories SEL-751 Fault passage indicators: ABB RIO600; A-Eberle EOR 3-D compact (U29+C29)
2	Protection relays: Siemens SIPROTEC 7SJ81 Fault passage indic.: Hortsmann ComPass B 2.0
3	Fault passage indicators: A-eberle EOR-3D compact (U06); Kries Inspector IKI-50

Tab. 1. Compatible IEDs

Note: Required rated burden for Group 2 and 3 is 200 kΩ/ 350 pF

Product	Catalogue	Instructions for instal., use and maintenance
KECA 80 C85	1VLC000715	1VLM000806
KECA 80 D85	1VLC000722	1VLM000805
KEVA C	1VLC000723	1VLM000808
KEVA C with 3,25 V output	1VLC000719	1VLM000829

Tab. 2. References

CONTACT US
ABB s.r.o., ELDS Brno
Videnska 117, 619 00 Brno, Czech Republic
Tel.: +420 547 152 021, +420 547 152 854
Fax: +420 547 152 626
E-mail: kontakt@cz.abb.com

www.abb.com

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