



Certificate No 019-16-0027-61439-02/R02

Company/Firm Name KALTES ELK. SAN. TİC. LTD. ŞTİ.

Company/Firm Address İKİTELLİ O.S.B. MAH. ATATÜRK BULVARI ALTAY İŞ
MRK. NO: 58/1-2 BAŞAKŞEHİR / İSTANBUL

Manufacturer Name KALTES ELK. SAN. TİC. LTD. ŞTİ.

Manufacturer Address İKİTELLİ O.S.B. MAH. ATATÜRK BULVARI ALTAY İŞ
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Registered Trade Mark SETLAK

Standard IEC 61439-1:2011 - Low-voltage switchgear and controlgear
assemblies - Part 1: General rules
IEC 61439-2:2011 - Low-voltage switchgear and controlgear
assemblies - Part 2: Power switchgear and controlgear assemblies

First Certification Date 28.11.2016

Revision Date 29.11.2018

Valid Until 28.11.2019

Scope of Certification

- Type/Model/Form: Low-Voltage Switchgear And Controlgear Assemblies Including ABB Switchgear, With 4000A Incoming ACB / Indoor Type / Form 4b
 - Type According to Function: L.V Switchgear and Controlgear Assembly
 - Type According Design: Power Switchgear and Controlgear Assembly (PSC-Assembly)
 - Type According to Conditions of Installation: Indoor / Stationary
 - Type According to Protection Against Electric Shock: Authorized Person
 - Rated Operational Voltage (U_e): 400 V
 - Rated Impulse Withstand Voltage on Main Circuit (U_{imp}): 8 kV
- (Continuation of scope is on page 2)



You can check the validity
of the certificate
by using QR code.

29 / 11 / 2018
Ata Gürü ARSLANLI
General Manager



Belge geçerlilik periyodu 3 yıl olup belgenin geçerliliği firmanın LVT ürün belgelendirme şartlarına uymasına ve yılda en az bir kez yapılacak gözetim denetiminin başarılı tamamlanmasına bağlıdır. TÜRKAK Uluslararası Akreditasyon Forumu (IAF) Karşılıklı Tanınma Anlaşmasını (MLA) imzalamıştır.

The validity period is 3 years and validity of the document depends on the success of surveillance audit to be held at least once a year and compliance of LVT product certification provisions of the company. TÜRKAK has signed International Accreditation Forum (IAF) and Multilateral Recognition Arrangement (MLA).





Scope of Certification KALTES ELEKTRİK SAN. TİC. LTD. ŞTİ.
(Continuation of 019-16-0027-61439-02/R02):

- Rated Impulse Withstand Voltage on Auxiliary Circuit (U_{imp}): -
- Rated Insulation Voltage (U_i): 690 V
- Rated Current (I_{nA}): 4000 A
- Rated Diversity Factor: 1
- Rated Currents and Diversity Factors of Each Circuit :ACB 4000 A:4000 A(1),
ACB 2500 A:1740 A(1), ACB 1600 A:1000 A(1), MCCB 800 A: 600 A(1),
MCCB 630 A:400 A(1), MCCB 250 A:160 A(1), MCCB 160 A: 100A(1)
- Rated Frequency (f_n): 50 Hz
- Details of Switching, Control and Protection Devices (Trade Mark/Model):
ABB SACE EMAX E4.2N 4000 Ekip Dip LSI 3p FHR - 1SDA071192R1 - 4000 A (1 Unit),
ABB SACE EMAX E2.2N 2500 Ekip Dip LSI 3p FHR - 1SDA071062R1- 2500 A (1 Unit),
ABB SACE EMAX E1.2C 1600 Ekip Dip LSI 3p FHR - 1SDA070872R1- 1600 A (1 Unit),
ABB SACE TMAX T6S 800, PR221DS-LS/I, In=800A - 1SDA060278R1- 800 A (1 Unit),
ABB SACE TMAX T5N 630, PR221DS-LS/I, In=630A - 1SDA054396R1- 630 A (1 Unit),
ABB SACE TMAX XT3N 250, TMD, In=250A - 1SDA068059R1 - 250 A (1 Unit),
ABB SACE TMAX XT1N 160, TMD, In=160A - 1SDA067418R1 - 160 A (1 Unit)
- Assembly Dimensions (mm) : 2800 x 2100 x 1000
- Ambient Air Temperature For Indoor Installation ($^{\circ}\text{C}$): -5 , +40
- Protection of Degree: IP41
- Cooling Type of Assembly (Natural/Active): Active
(QUICK QTF 1000APA23-H Roof Type Fan- 4 Units) -
(FULLTECH 900 m3/h - 74W - 59 Db Fan - 2 Units)
- Enclosure Properties (Metallic) (mm) :
Ereğli CCRS 6112-1,2 mm (Sides,Front and Back Covers),
Ereğli CCRS 6112-1,5 mm (Frame), Ereğli CCRS 6112-2,0 mm
(Front Doors, Inner Parts ve Patten)
- Type of Lifting (Lugs/Base): Lugs
- Lock System (Trademark/Model) : Espagnolette Lock System (MESAN - 109.44.096)
- Ventilation Panel (Trademark/Model/Qty/Dim): QUICK FIL 2500 - 22 Units - 268 x 268
- Insulator (Trademark/Model) :
Bar Insulator (EAE EB MA 1031) (60Units), Bar Insulator (EAE EBPP 10-X95)(12 Units),
Bar Insulator (IRTU IRMPL1007 1NMK-3 M8) (6 Units)
- Main Busbar Cross-Section and Length : $3 \times [3 \times (120 \times 10)] \text{ mm}^2 \text{ Cu}$
(L_1 :3100 mm, L_2 : 3100 mm, L_3 : 3100 mm)
- Neutral Busbar Cross-Section and Length: $2 \times (120 \times 10) \text{ mm}^2 \text{ Cu}$ (1710 mm)
- Earthing Busbar Cross-Section and Length: $(120 \times 10) \text{ mm}^2 \text{ Cu}$ (1710 mm)
- Distance Between Phases: Horizontal(L_1 - L_2 : 100 mm, L_2 - L_3 : 100 mm)(Main Busbar)
- Main Busbar Arrangement: Horizontal

(Continuation of scope is on page 3)

29 / 11 / 2018
Ata Gürül ARSLANLI
General Manager

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Belge geçerlilik periyodu 3 yıl olup belgenin geçerliliği firmanın LVT ürün belgelendirme şartlarına uymasına ve yılda en az bir kez yapılacak gözetim denetiminin başarılı tamamlanmasına bağlıdır. TÜRKAK Uluslararası Akreditasyon Forumu (IAF) Karşılıklı Tanınma Anlaşmasını (MLA) imzalamıştır.

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Scope of Certification KALTES ELEKTRİK SAN. TİC. LTD. ŞTİ.
(Continuation of 019-16-0027-61439-02/R02):

- Rated Short Time Withstand Current of Main Busbar (Icw), and Duration (sec):
Effective: 60 kA (1 sec), Peak: 132 kA
- Rated Short Time Withstand Current of Incoming Busbar (Icw), and Duration (sec):
Effective: 60 kA (1 sec), Peak: 132 kA (4000 A Incoming Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (Icw), and Duration (sec):
Effective: 50 kA (1 sec), Peak: 105 kA (2500 A Distribution Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (Icw), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA (1600 A Distribution Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (Icw), and Duration (sec):
Effective: 30 kA (1 sec), Peak: 63 kA (800 A Distribution Busbar)
- Rated Conditional Short Circuit Current of Protection Device(Icc):
60 kA - 4000 A (ABB SACE EMAX E4.2N 4000 Ekip Dip LSI 3p FHR-1SDA071192R1-4000 A)
- Rated Conditional Short Circuit Current of Protection Device(Icc):
50 kA - 2500 A (ABB SACE EMAX E2.2N 2500 Ekip Dip LSI 3p FHR-1SDA071062R1-2500 A)
- Rated Conditional Short Circuit Current of Protection Device(Icc):
40 kA - 1600 A (ABB SACE EMAX E1.2C 1600 Ekip Dip LSI 3p FHR-1SDA070872R1-1600 A)
- Rated Conditional Short Circuit Current of Protection Device(Icc):
25 kA - 800 A (ABB SACE TMAX T6S 800, PR221DS-LS/I, In=800A-1SDA060278R1-800 A)
- Rated Conditional Short Circuit Current of Protection Device(Icc):
25 kA - 630 A (ABB SACE TMAX T5N 630, PR221DS-LS/I, In=630A-1SDA054396R1-630A)
- Rated Short Time Withstand Current of Neutral Busbar (Icw), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA
- Rated Short Time Withstand Current of Protective Conductor Busbar (Icw), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA

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