



Certificate No 019-15-0019-61439-02/R03

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

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

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

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Registered Trade Mark SETLAK

Standard TS EN 61439-1:2012+AC:2014+T1:2014: Alçak gerilim anahtarlama düzeni ve kontrol düzeni panoları - Bölüm 1: Genel kurallar
IEC 61439-1:2011: Low-voltage switchgear and controlgear assemblies - Part 1: General rules
TS EN 61439-2:2012: Alçak gerilim anahtarlama ve kontrol düzeni donanımları - bölüm 2: Güç anahtarlama ve kontrol düzeni donanımları
IEC 61439-2:2011: Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies

First Certification Date 30.11.2015

Revision Date 29.11.2018

Valid Until 28.11.2021

Scope of Certification

- Type/Model/Form: 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_n): 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 Gürül 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 tamamlamasına 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 ELK. SAN. TİC. LTD. ŞTİ.
(Continuation of 019-15-0019-61439-02/R03):

- Rated Impulse Withstand Voltage on Auxiliary Circuit (U_{imp}): -
- Rated Insulation Voltage (U_i): 690 V
- Rated Current (I_{nA}): 3600 A
- Rated Diversity Factor: 1
- Rated Currents and Diversity Factors of Each Circuit :
ACB 4000 A:3600 A (1), ACB 2500 A:2000 A (1),
ACB 1600 A:1000 A (1), ACB 1000 A: 600 A (1)
- Rated Frequency (f_n): 50 Hz
- Details of Switching, Control and Protection Devices (Trade Mark/Model):
LS METASOL AS-40E3-40H 3x4000A (1 Unit),
LS METASOL AS-25E3-25H 3x2500A (1 Unit),
LS METASOL AN-16D3-16H 3x1600A (1 Unit),
LS METASOL AN-10D3-10H 3x1000A (1 Unit)
- Assembly Dimensions (mm) : 2800 x 2100 x 1000
- Ambient Air Temperature For Indoor Installation ($^{\circ}C$): -5 , +40
- IP: 41
- Cooling Type of Assembly (Natural/Active):
Active (QUICK QTF 1000APA23-H Roof Type Fan- 4 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),
Setlak Zamak Alloy – M12 Holes (Corner Mounting Part)
- 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 – 20 Units – 250 x 250
- Insulator (Trademark/Model) :
Bar Insulator (EAE EB MA 1031) (60Units),
Bar Insulator (EAE EBPP 10-X95) (12 Units),
Bar Insulator (İRTU İRMPL1007 1NMK-3 M8) (6 Units)
- Main Busbar Cross-Section and Length :
3x[3x(120x10)] mm² Cu (L_1 :3100 mm, L_2 : 3100 mm, L_3 : 3100 mm)
- Neutral Busbar Cross-Section and Length: 2x(120x10) mm² Cu (1710 mm)
- Earthing Busbar Cross-Section and Length: (120x10) mm² 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 ELK. SAN. TİC. LTD. ŞTİ.
(Continuation of 019-15-0019-61439-02/R03):

- Rated Short Time Withstand Current of Main Busbar (I_{cw}), and Duration (sec):
Effective: 60 kA (1 sec), Peak: 132 kA
- Rated Short Time Withstand Current of Incoming Busbar (I_{cw}), and Duration (sec):
Effective: 60 kA (1 sec), Peak: 132 kA (4000 A Incoming Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (I_{cw}), and Duration (sec):
Effective: 50 kA (1 sec), Peak: 105 kA (2500 A Distribution Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (I_{cw}), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA (1600 A Distribution Busbar)
- Rated Short Time Withstand Current of Distribution Busbar (I_{cw}), and Duration (sec):
Effective: 30 kA (1 sec), Peak: 63 kA (1000 A Distribution Busbar)
- Rated Conditional Short Circuit Current of Protection Device (I_{cc}):
60 kA - 4000 A (LS METASOL AS-40E3-40H 3x4000A)
- Rated Conditional Short Circuit Current of Protection Device (I_{cc}):
50 kA - 2500 A (LS METASOL AS-25E3-25H 3x2500A)
- Rated Conditional Short Circuit Current of Protection Device (I_{cc}):
40 kA - 1600 A (LS METASOL AN-16D3-16H 3x1600A)
- Rated Conditional Short Circuit Current of Protection Device (I_{cc}):
30 kA - 1000 A (LS METASOL AN-10D3-10H 3x1000A)
- Rated Short Time Withstand Current of Neutral Busbar (I_{cw}), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA
- Rated Short Time Withstand Current of Protective Conductor Busbar (I_{cw}), and Duration (sec):
Effective: 40 kA (1 sec), Peak: 84 kA

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