



CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME ANONİM ŞİRKETİ



KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2
ATAŞEHİR/İSTANBUL/TURKİYE

Deney Raporu
Test Report

LVD-183-40

01-20

Müşterinin adı /adres:
Customer name/address

Mutlusan Plastik Elektrik San. ve Tic. A.Ş./ İOSB mah. Enkoop cad. No: 7 Başakşehir / İstanbul

Üretici/ Üretim Yeri:
Manufacturer/ Manufacturing Location

Mutlusan Plastik Elektrik San. ve Tic. A.Ş./ İOSB mah. Enkoop cad. No: 7 Başakşehir / İstanbul

İstek Numarası:
Order no.

Numunenin Adı ve Tanımı:
Name and identity of test item

010 090 010001; Sinyal Armatürü / Signal Armature

Numunenin Kabul tarihi:
The date of receipt of test item

26-12-2019

Açıklamalar:
Remarks

Ürün ilgili testlerden geçmiştir, lütfen raporu inceleyiniz. / The product passes related tests, see report below.

Deneyin yapıldığı tarih:
Date of Test

02-01-2020

Deneyin Yapıldığı Yer:
Testing Location

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Deney Standartı
Test Standard

EN 60073:2002

Raporun Sayfa Sayısı:
Number of pages of the Report

6 sayfa/pages

Tarih
Date

02-01-2020

Deney Sorumlusu
Person in charge of test

Naim Koralp KARAKOÇ

Laboratuvar Müdürü
Head of Testing Laboratory

Timur GÜSER



N. Koralp

T. Güser

Bu rapor laboratuvarın izni olmadan kısmen kopyalanıp çoğaltılamaz.

İmzasız ve mühürsüz raporlar geçersizdir.

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Testing reports without signature and seal are not valid.

Rapor No / Report No:LVD-183-40

Format No:F510_44_R1.0

CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME ANONİM ŞİRKETİ

KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2 ATAŞEHİR/İSTANBUL/TURKİYE

| | |
|--|---|
| TEST REPORT IEC 60073 Basic and safety principles for man-machine interface, marking and identification- Coding principles for indication devices and actuators | |
| Report Reference No.....: | LVD-183-40 |
| Date of issue.....: | 02-01-2020 |
| Contents.....: | 6 pages |
| Testing Laboratory.....: | CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME A.Ş. |
| Address.....: | KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2 ATAŞEHİR/İSTANBUL |
| Testing location.....: | CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME A.Ş. |
| Address.....: | KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2 ATAŞEHİR/İSTANBUL |
| Applicant's name.....: | Mutlusan Plastik Elektrik San. ve Tic. A.Ş. |
| Address.....: | IOSB mah. Enkoop cad. No: 7 Başakşehir / İstanbul |
| Test specification: | |
| Standard.....: | EN 60073:2002 |
| Test procedure.....: | Type Test |
| Non-standard test method.....: | N/A |
| Test Report Form No.....: | F510_44_R1.0 |
| Test item description.....: | SIGNAL ARMATURE |
| Trade Mark.....: |  |
| Manufacturer.....: | Mutlusan Plastik Elektrik San. ve Tic. A.Ş. |
| Model/Type reference.....: | 010 090 010001 |
| Ratings.....: | 220V |

| Clause | Requirement | Result - Remark | Verdict |
|----------|---|--|----------|
| 4 | CODING PRINCIPLES | | P |
| 4.1 | General | | P |
| | Visual codes: | Color | P |
| | Acoustic codes: | No acoustic | N/A |
| | Codes for touch sensation: | No codes for touch sensation | N/A |
| 4.2 | Visual codes | Color and elements change over time are the most effective visual tools. Therefore, these codes should be used with appropriate meanings. As an example: colors to give priority and lighted warning to attract attention. It is recommended that the color coding tool should not be used alone if the person with color blind works as an operator. | P |
| 4.2.1 | Color coding | Red, yellow, green, blue, black, gray, white | P |
| 4.2.1.1 | Choice of colors | See table 1 | P |
| 4.2.1.2 | Colors on video display screens | | N/A |
| 4.2.1.3 | Contrasting colors | | N/A |
| 4.2.2 | Coding with shapes and / or position | No coding with shapes and / or position | P |
| 4.2.3 | Coding by changing the characteristics over time | | N/A |
| 4.2.3.1 | General | | N/A |
| 4.2.3.2 | Illuminated warning frequencies with visual characteristics | | N/A |
| 4.3 | Acoustic codes | No acoustic codes | N/A |
| 4.4 | Codes for touch sensation: | No codes for touch sensation | N/A |
| 5 | APPLICATION RULES | | P |
| 5.1 | Indicator shapes | a) Stimulation To attract the operator's attention or to show that he or she must perform a specific task | P |
| 5.2 | Types of activation | It is only visually indicated by color codes. | P |
| 5.2.1 | Non-illuminated actuating elements | | P |
| 5.2.1.1 | Emergency actuating elements | Red color | P |
| 5.2.1.2 | STOP / CIRCUIT BREAKER activation elements | While the main preference is for black, the choice for STOP / CIRCUIT BREAKER actuating elements colors are white, gray and black. Red is also allowed. Green should not be used. | P |
| 5.2.1.3 | RUN / CIRCUIT OFF activation elements | Although the main preference is for white, the switching devices are switched off and the the preferred colors for choosing RUN / CIRCLE OFF activation gray and | p |

| | | | |
|-----------|--|--|-----|
| | | black truck. green is also allowed. red is not used. | |
| 5.2.1.4 | Using white and black for specific meanings | If white and black colors are used to distinguish between START / CIRC OFF and STOP / CIRCUIT activation elements, white color should be used for START / CIRC OFF activation elements, black color must be used for STOP / CIRCUIT activation elements. | P |
| 5.2.1.5 | The same actuating elements used for START and STOP or CLOSING CIRCUIT and CUTTING CIRCUIT | White, gray and black can be preferred as a START / CIRCUIT CLOSED STOP / CIRCUIT activation element when actuated multiple times, respectively. Not green and red color | P |
| 5.2.2 | Illuminated actuating elements | No illuminated actuating elements | N/A |
| 5.2.2.1 | Types | - | N/A |
| 5.2.2.2 | Basic rule | - | N/A |
| 5.2.2.3 | Types of use | - | N/A |
| 5.2.2.3.1 | Main operating modes for actuators a and b | - | N/A |
| | a) Indicator | - | N/A |
| | b) confirmation | - | N/A |
| 5.2.2.3.2 | Tip c) | - | N/A |
| 5.2.3 | Actuating elements that act as part of a pictorial display on a video screen | No video screen | N/A |
| 5.2.3.1 | Introduction of activation elements | - | N/A |
| 5.2.3.2 | Emergency starting situations | - | N/A |

Table 1

| MEANING OF COLORS OF THE INDICATORS IN RE | | | |
|---|---------------------------------|--|--|
| COLOR | MEANING | EXPLANATION | ACTION OF THE OPERATOR |
| RED | Emergency | Dangerous conditions | Immediate action to deal with a dangerous condition e.g. by: -operating emergency stop -opening safety valve -starting cooling pump |
| YELLOW | Abnormal | -Abnormal condition -Impending critical condition | Monitoring and/or intervention (e.g. by reestablishing the intended function) |
| GREEN | Normal | Normal conditions | Optional |
| BLUE | Mandatory necessarily important | | |
| WHITE GRAY BLACK | No specific meaning assigned | | |

Annex 1 – Photos



Photo Documentation

Annex 2 - Declaration identity



As Mutlusan Plastik Elektrik San ve Tic AŞ; we declare that 010 090 010001 coded 10 MM SIGNAL ARMATURE 220V product is similar to the following products electrically and mechanically.

| Product Name | Product Code |
|---------------------------|----------------|
| 14MM SIGNAL ARMATURE 220V | 010 090 010007 |
| 22MM SIGNAL ARMATURE 220V | 010 090 010010 |

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Tic.Sic.No:399323 Mersis No:0626-0366-8870-0015

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