



# CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME ANONİM ŞİRKETİ



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

*Deney Raporu*  
Test Report

LVD-183-37

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.

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**Numunenin Adı ve Tanımı:**  
Name and identity of test item

*010 090 010002 ; 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

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

**Deney Standartı**  
Test Standard

*EN 60073:2002*

**Raporun Sayfa Sayısı:**  
Number of pages of the Report

*5 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.Korakoc*

*T.Guser*

*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-183-37  
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

<b>TEST REPORT</b> <b>IEC 60073</b> <b>Basic and safety principles for man-machine interface, marking and identification- Coding principles for indication devices and actuators</b>	
<b>Report Reference No.....:</b>	LVD-183-37
<b>Date of issue.....:</b>	02-01-2020
<b>Contents.....:</b>	5 pages
<b>Testing Laboratory.....:</b>	CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME A.Ş.
<b>Address.....:</b>	KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2 ATAŞEHİR/İSTANBUL
<b>Testing location.....:</b>	CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME A.Ş.
<b>Address.....:</b>	KAYIŞDAĞI MAH. GÜLÇİN SOK. NO:2/2 ATAŞEHİR/İSTANBUL
<b>Applicant's name.....:</b>	Mutlusan Plastik Elektrik San. ve Tic. A.Ş.
<b>Address.....:</b>	IOSB mah. Enkoop cad. No: 7 Başakşehir / İstanbul
<b>Test specification:</b>	
<b>Standard.....:</b>	EN 60073:2002
<b>Test procedure.....:</b>	Type Test
<b>Non-standard test method.....:</b>	N/A
<b>Test Report Form No.....:</b>	F510_44_R1.0
<b>Test item description.....:</b>	SIGNAL ARMATURE
<b>Trade Mark.....:</b>	
<b>Manufacturer.....:</b>	Mutlusan Plastik Elektrik San. ve Tic. A.Ş.
<b>Model/Type reference.....:</b>	010 090 010002
<b>Ratings.....:</b>	220V

Clause	Requirement	Result - Remark	Verdict
<b>4</b>	<b>CODING PRINCIPLES</b>		<b>P</b>
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
<b>5</b>	<b>APPLICATION RULES</b>		<b>P</b>
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 black truck. green is also allowed. red is not used.	p

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

