



CGS TEST HİZMETLERİ TEKNİK KONTROL VE BELGELENDİRME ANONİM ŞİRKETİ



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

Deney Raporu
Test Report

LVD-183-41

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 070002; 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

Deney Sorumlusu
Person in charge of test

Laboratuvar Müdürü
Head of Testing Laboratory

02-01-2020

Naim Koralp KARAKOÇ

Timur GÜSER



Naim Koralp KARAKOÇ

Timur GÜSER

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Rapor No / Report No:LVD-183-41
Format No:F510_44_R1.0

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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-183-41
Date of issue:	02-01-2020
Contents:	5 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 070002
Ratings:	24V

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