

Bölüm No.	Harmonize Tip TS	Harmonize Tip VDE	TS No.	VDE No.	IEC No.	Anma Gerilimi	Yalıtkan Cinsi
Part Number	Harmonized Code TS	Harmonized Code TS	TS No.	VDE No.	IEC No.	Rated Voltage	Insulation Material
2	H05V-U	NYA	9758	0281-3	-	300/500 V	PVC
2	H07V-U	NYA	9758	0281-3	-	450/750 V	PVC
2	H07V-R	NYA	9758	0281-3	-	450/750 V	PVC
2	H05V-K	NYAF	9758	0281-3	-	300/500 V	PVC
2	H07V-K	NYAF	9758	0281-3	-	450/500 V	PVC
2	H05V-K	NYAF	-	0281	-	300/500 V	PVC
2	H03VH-H	NYAFZ	9760	0281	-	300/500 V	PVC
2	H03VV-F	NYLHYrd	9760	0281-5	-	300/500 V	PVC
2	H03VVH2-F	NYLHYfl	9760	0281	-	300/500 V	PVC
2	H05VV-F	NYMHY	9760	0281-5	-	300/500 V	PVC
2	NVV	NYM	9759	0250	-	300/500 V	PVC
3	YVV	NYN	60.502	0271/0276	502	0.6/1 kV	PVC
3	YVMV	NYCY	60.502	0271/0276	502	0.6/1 kV	PVC
3	YVOV	NYRGY	60.502	0271	502	0.6/1 kV	PVC
3	YVŞV	NYFGY	60.502	0271	502	0.6/1 kV	PVC
4	YE <sub>3</sub> V	2XY	60.502	0276	502	0.6/1 kV	XLPE
4	YE <sub>3</sub> MV	2XCY	60.502	0276	502	0.6/1 kV	XLPE
4	YE <sub>3</sub> ŞV	2XFGY	60.502	-	502	0.6/1 kV	XLPE
4	YE <sub>3</sub> OV	2XRY	60.502	-	502	0.6/1 kV	XLPE
5	YVSV	NYSY	60.502	0271	502	3.6/6 kV	PVC
5	YVŞV	NYFGY	60.502	0271	502	3.6/6 kV	PVC
6	YE <sub>3</sub> SV	2XSY	60.502	-	502	3.6/6 kV	XLPE
6	YE <sub>3</sub> SHŞV	2XSEYFGY	60.502	-	502	3.6/6 kV	XLPE
6	YE <sub>3</sub> SV	N2XSY	60.502	0273	502	6/10 kV	XLPE
6	YE <sub>3</sub> SHŞV	N2XSEYFGY	60.502	0273	502	6/10 kV	XLPE
6	E <sub>3</sub> SV	2XSY	-	-	502	8.7/15 kV	XLPE
6	E <sub>3</sub> ŞV	2XSEYFGY	-	-	502	8.7/15 kV	XLPE
6	YE <sub>3</sub> SV	2XSY	2742	-	-	20.3/35 kV	XLPE
6	YE <sub>3</sub> ŞV	2XSEYFGY	2742	-	-	20.3/35 kV	XLPE
6	-	2XS(FL)2Y-YE <sub>3</sub> S(AL)E	-	-	-	89/154 kV	XLPE
7	-	NHXMH	-	0250	-	300/500 V	HX XLPE
7	-	NHXMH	-	0266	-	0.6/1 kV	HX XLPE

\* Harmonize edildiğinden dolayı kullanılmamaktadır.  
 \* This abbreviation is invalid due to harmonization.

## Harmonize Semboller / Harmonized Symbols

### Harmonize sistemde semboller ve açıklamaları Symbols and explanations in harmonized systems

H 05 V V - F 3 G 2.5

#### Tip / Basic Type

- H Harmonize Tip / Harmonized Type
- A Ulusal Tip / National Tyep

#### Ana Gerilim / Rated Voltage

- 01 100/100 V
- 03 300/300 V
- 05 300/500 V
- 07 450/750V
- 1 0,6/1 kV

#### İzolasyon Malzemesi / Insulation Material

- V PVC / PVC (Polivinil Klorür)
- V2 PVC / (90°C)
- V3 PVC Düşük Sıcaklıkta Çalışabilen / PVC Cold-Flexible
- B Etilenpropilen Kauçuk / Ethylenpropylen Rubber
- E PE (Polietilen) / PE (Polyethylene)
- X XLPE (Çapraz Bağlı Polietilen) / XLPE (Crosslinked PE)
- R Doğal ve/veya Sentetik Kauçuk / Rubber
- S Silikon Kauçuk / Silicone Rubber

#### Kılıf Malzeme / Sheath Material

- V PVC / PVC (Polivinil Klorür)
- V2 PVC / (90°C)
- V3 PVC Düşük Sıcaklıkta Çalışabilen / PVC Cold-Flexible
- V5 PVC Yağa Dayanıklılı / PVC With Enhanced Oil Resistance
- Q Poliüretan / Polyurethane
- J Cam Fiber Örgü / Glass Fibre Braid
- R Doğal ve/veya Sentetik Kauçuk / Rubber
- N Polikloropren Kauçuk (PCP) / Polychloroprene Rubber
- S Silikon Kauçuk / Silicone Rubber
- T Tekstil Örgü / Textile Braid

#### Özel Konstrüksiyon / Special Construction

- C Bakır Örgü Ekran / Copper Screen Braiding
- H Damarlı Ayrılabilen Yassı Kablo / Flat With Divisebli
- H2 Damarlı Ayrılmayan Yassı Kablo / Flat, Non - Divisebli
- H6 Damarlı Ayrılmayan Yassı Kablo-Vinçler için / Flat, Notseparable, for Lifts
- H8 Spiral Kablo / Helicam/Spiral Cable

#### İletken Tipi / Conductor Form

- U Tekli İletken / Solid Conductor
- R Çoklu İletken / Stranded Conductor
- K İnce Çok Tellli İletken (permanent installation)/ Sabit (Fine Wire Conductor)
- F İnce Çok Tellli İletken (bükülgen) / Fine Wire Conductor (flexible)
- H Çok İnce Tellli İletken / Super-Fine Wire Conductor
- D İnce Çok Tellli İletken (kaynak kablosu) / Fine Wire Core For Welding Cable
- E Çok İnce Tellli İletken (kaynak kablosu) / Super-Fine Core For Welding Cable
- E Gelinteli Biçiminde İletken / Tinsel Conductor

#### Damar Sayısı / Number of Cores

- G Sarı Yeşil Koruyucu İletken / With Protective Conductor
- X Koruyucu İletkensiz / Without Protective Conductor

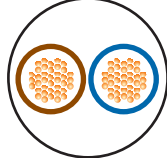
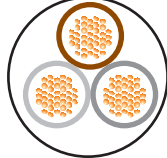
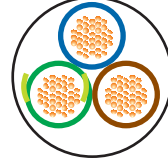
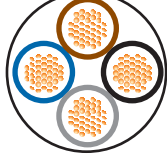
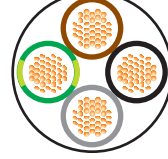
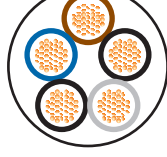
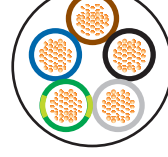
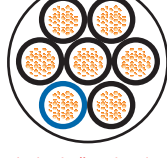

#### İletken Kesiti / Conductor Cross-Section

Yeşil/sarı damarsız ve Yeşil/Sarı damarlı olacak şekilde standartlar doğrultusunda alternatifli olarak

**0,6/1 kV Alçak Gerilim Kablolarında** renk dağılımı aşağıdaki şekilde üretilebilecektir

(Firmamızca stok tutulacak kablolar  içinde gösterilmiştir)

Core colours for **0,6/1 kV Low Voltage Cables** able to produced with/without Yellow/Green core according to the standards as below

Kablo Tipleri	Damar Sayısı	Yeşil / Sarımsız	Yeşil / Sarılı
Cable Types	Core Numbers	Without Yellow/Green	Without Yellow/Green
<b>YVV</b> <b>YVMV</b> <b>YVOV</b> <b>YVŞV</b> <b>YE3V</b> <b>YE3MV</b> <b>YE3OV</b> <b>YE3ŞV</b> <b>N2XH</b> <b>N2XH FE180</b>	2	(blue-brown)  (mavi-kahverengi)	
	3	(brown-black-gray)  (kahverengi-siyah-gri)	(yellow/green/blue-brown)  (yeşil/sarı-mavi-kahverengi)
	$3 \frac{1}{2} - 4$	(blue-brown-black-gray)  (mavi-kahverengi-siyah-gri)	(yellow/green/brown-black-gray)  (yeşil/sarı-mavi-kahverengi-siyah-gri)
	5	(blue-brown-black-gray-black)  (mavi-kahverengi-siyah-gri-siyah)	(yellow/green/blue-brown-black-gray)  (yeşil/sarı-mavi-kahverengi-siyah-gri)
	> 5	(blue-white-number on black)  (mavi-siyah-üzerine beyaz)	(yellow/green-white number of black)  (yeşil/sarı-siyah üzerine beyaz numara baskılı)


# Enerji Kabloları Yeni Kablo Damar Renkleri

## Power Cables New Cable Core Colours

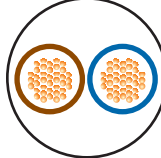
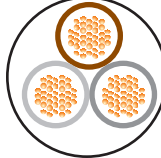
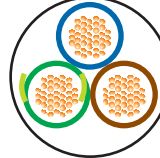
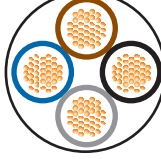
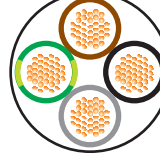
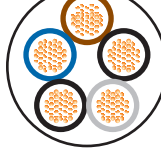
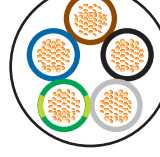
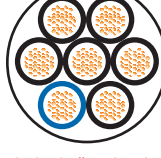



Yeşil/sarı damarsız ve Yeşil/Sarı damarlı olacak şekilde standartlar doğrultusunda alternatifli olarak

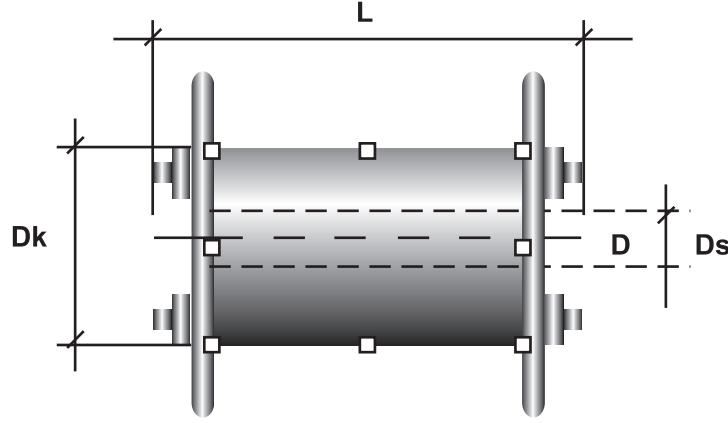
**Tesisat Kablolarındaki** renk dağılımı aşağıdaki şekilde üretilebilecektir

(Firmamızca stok tutulacak kablolar  içinde gösterilmiştir)

Core colours for cables are able to produced with/without Yellow/Green core according to the standards as below

Kablo Tipleri	Damar Sayısı	Yeşil / Sarı	Yeşil / Sarılı
Cable Types	Core Numbers	Without Yellow/Green	Without Yellow/Green
<b>NVV</b> <b>H03VV-F</b> <b>H05VV-F</b> <b>NHXMH</b> <b>NHMH</b> <b>H05Z1Z1-F</b>	2	(blue-brown)  (mavi-kahverengi)	
	3	(brown-black-gray)  (kahverengi-siyah-gri)	(yellow/green/blue-brown)  (yeşil/sarı-mavi-kahverengi)
	$3 \frac{1}{2} - 4$	(blue-brown-black-gray)  (mavi-kahverengi-siyah-gri)	(yellow/green/brown-black-gray)  (yeşil/sarı-mavi-kahverengi-siyah-gri)
	5	(blue-brown-black-gray-black)  (mavi-kahverengi-siyah-gri-siyah)	(yellow/green/blue-brown-black-gray)  (yeşil/sarı-mavi-kahverengi-siyah-gri)
	> 5	(blue-white-number on black)  (mavi-siyah-üzerine beyaz)	(yellow/green-white number of black)  (yeşil/sarı-siyah üzerine beyaz numara baskılı)

**Makaraların taşıma kapasiteleri, ölçüleri, ağırlıkları ve hacimleri**  
Cable drums carrying capacity, size weight and volume



Makara Tipi	Ölçüler				Taşıma Kapasitesi (kg)	Ağırlıklar					Hacim (m <sup>3</sup> )
	Ds (mm)	Dk (mm)	L (mm)	D (mm)		Boş (a)	Kapalı %50 (b)	Toplam %50 (a+b)	Kapalı %50 (c)	Toplam %50 (a+c)	
Drum Type	Size				Carrying Capacity (kg)	Weight					Volume (m <sup>3</sup> )
	Ds (mm)	Dk (mm)	L (mm)	D (mm)		Boş (a)	Closed %50 (b)	Total %50 (a+b)	Closed %50 (c)	Total %50 (a+c)	
70	700	350	515	85	500	23	7	30	14	37	0,25
80	800	400	515	85	650	36	8	44	16	52	0,33
90	900	450	665	85	800	50	11	61	22	72	0,54
100	1000	500	665	85	1000	60	125	75	30	90	0,67
110	1100	550	667	85	1200	75	16	91	32	107	0,82
120	1200	600	840	85	1400	90	17	107	34	124	1,21
130	1300	600	840	85	1600	100	19	119	38	138	1,42
140	1400	700	840	85	1800	115	20	135	40	155	1,65
150	1500	700	840	85	2000	150	23	173	46	196	1,89
160	1600	800	1080	108	2500	210	25	135	50	263	2,76
180	1800	1000	1080	108	2800	70	30	300	60	330	3,5
200	2000	1200	1080	108	3500	350	35	385	70	420	4,32
210	2100	1200	1080	108	3700	380	38	418	76	456	4,76
220	2200	1400	1360	108	4000	420	40	460	80	500	6,58
230	2300	1400	1360	108	4500	450	45	495	90	540	7,19
240	2400	1500	1360	108	5000	480	48	528	96	576	7,83
250	2500	1500	1360	108	5500	550	52	602	104	654	8,5
260	2600	1600	1360	108	6000	650	55	705	110	760	9,19
280	2800	1800	1635	108	7500	850	80	930	160	1010	12,82
290	2900	2000	1865	108	8000	1000	90	1090	180	1180	15,68

# Makaraların Kablo Sarma Kapasiteleri

## Capacity of Cable Drums



Kablo Çapı Cable Dia. (mm)	Makara Flanş Çapı-Ds(cm) Reel Flange Diameter-Ds (cm)																					
	70	80	90	100	110	120	130	140	150	160	150	200	210	220	230	240	250	260	280	290		
5	3000																					
6	2000																					
7	1500	2050																				
8	1150	1570																				
9	920	1250	2350																			
10	750	1030	1850	2350																		
11	600	8030	1500	1900																		
12	500	700	1250	1600	2100																	
13	440	600	1100	1400	1850																	
14	380	520	950	1200	1580																	
15	330	450	830	1050	1400	2250																
16	280	380	700	890	1200	2000																
17	250	350	620	790	1050	1700	2170															
18	230	310	570	730	950	1550	1950	2150														
19	210	290	500	640	850	1380	1750	1950														
20	190	260	460	590	780	1240	1570	1750	2120													
21	170	230	420	530	700	1100	1400	1560	1900													
21	150	210	370	470	620	990	1250	1390	1700													
23	140	190	340	430	570	920	1160	1290	1570	2120												
24	130	180	330	410	550	850	1070	1190	140	1910												
25	120	160	300	380	500	790	990	1100	1350	1780	2100											
26	110	150	280	350	450	700	880	980	1200	1660	1900											
27	100	140	250	320	420	650	820	910	1100	1500	2710	2020										
28		130	230	290	390	630	790	880	1080	1410	1660	1900	2210									
29		120	220	280	370	580	730	820	990	1310	1540	1700	2000									
30		110	200	260	340	540	680	750	920	1220	1440	1650	1950									
31		110	190	250	320	500	630	700	850	1140	1340	1540	1800									
32		100	180	230	300	450	580	640	780	1050	1230	1410	1670	2020								
33			170	220	290	440	560	620	760	980	1150	1320	1560	1910								
34			160	200	270	410	510	570	700	960	1080	1240	1460	1800	2120							
35			150	190	260	380	480	530	650	890	1050	1150	1350	1700	1980	2100						
36			140	180	230	370	460	510	630	830	970	1120	1320	1600	1860	1970						
37			130	170	220	340	430	470	580	810	910	1150	1220	1500	1750	1850	2120					
38			120	160	210	330	420	460	560	750	880	970	1140	1460	1700	1730	2000	2100				
39			120	150	200	300	380	430	520	700	830	950	1110	1380	1600	1680	1950	2050				
40			110	150	190	290	380	420	500	680	800	870	1030	1280	1510	1600	1830	1920				
41			100	140	170	270	340	380	460	630	750	850	1000	1250	1460	1480	1710	1800				
42			100	130	160	260	330	360	450	610	680	780	920	1160	1360	1440	1640	1730				
43				120	160	250	320	350	440	570	660	760	890	1090	1270	1340	1550	1630				
44				120	140	230	290	320	400	550	650	700	830	1060	1240	1250	1440	1520	2100			
45				110	140	230	290	320	390	510	600	690	810	990	1160	1220	1410	1490	2000			
46				100	140	220	280	310	380	500	580	670	790	960	1140	1150	1310	1380	1920	2100		
47					130	200	260	280	340	480	530	610	730	900	1060	1120	1280	1350	1820	2000		
48					120	200	250	270	330	440	520	600	710	870	1040	1100	1260	1320	1710	1880		
49					110	190	240	270	330	440	510	550	650	820	960	1020	1170	1230	1670	1830		
50					110	170	220	240	300	400	470	540	640	800	940	990	1150	1200	1570	1730		
51					110	170	210	240	290	390	460	530	620	750	870	920	1070	1120	1540	1680		
52					110	160	200	230	280	370	440	470	570	710	850	890	1030	1080	1420	1580		
53						150	190	210	250	350	410	470	550	700	820	830	970	1020	1410	1480		
54						140	180	200	250	340	400	460	540	660	770	820	940	990	1310	1460		
55						140	180	200	240	330	390	440	530	630	750	790	920	960	1280	1370		
56						140	170	190	240	320	350	410	480	550	700	740	860	900	1180	1350		
57						130	170	190	230	300	350	400	480	580	690	730	830	880	1160	1280		
58						120	150	170	210	290	340	400	460	570	670	700	820	870	1080	1240		
59						120	150	160	210	290	340	390	460	560	660	660	760	800	1060	1220		
60						110	140	160	200	280	310	350	420	520	610	650	750	780	1050	1150		
61						110	140	160	190	260	300	350	410	510	600	640	740	780	970	1140		
62						110	140	160	170	250	290	330	400	490	580	580	670	700	960	1050		
63							130	140	170	250	290	330	390	460	540	570	660	700	940	1030		
64							120	140	170	240	280	300	350	450	530	560	650	690	880	1020		
65							120	130	160	240	260	300	350	450	520	550	640	680	870	960		
66							120	130	160	210	250	290	340	440	510	510	590	620	850	940		
67							110	130	160	210	250	280	330	400	470	500	580	610	780	920		
68							110	130	150	210	240	280	330	390	460	490	560	590	770	860		
69							110	120	130	200	240	270	320	380	450	480	550	580	760	850		
70								110	130	200	210	240	290	370	440	470	550	570	740	830		
71									110	130	180	210	240	290	370	420	440	500	530	690	790	
72										110	130	170	200	230	280	340	400	420	490	520	680	760
73										100	130	170	200	230	270	330	390	410	480	510	750	
											130	170	200	230	270	330	390	410				

0,6/1 Kv PVC İzoleli PVC dış kılıflı kabloların muhtelif güçleri belirli gerilim düşümünde taşıyabileceği en uzun mesafeler (3 ve 4 damarlı kablolar)

Maximum distance of 0,6/1 Kv cables with PVC insulation and PVC outer sheath for a range of power/current values (3 and 4 core)\*

Gerilim Düşümü %5 / Voltage Drop %5

Gerilim Düşümü %3 / Voltage Drop %3

3 - 380V

Cos=0,9

Kesit (mm<sup>2</sup>) / Nominal / Cross-Section

Güç Power Kw	Yük Akımı Current A	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
2,5	4,2	178	291	466	695	1162											
		103	168	271	404	675	1063										
3	5	150	244	391	584	976	1536										
		87	142	227	339	567	892	1391									
3,5	5,9	127	207	331	495	827	1302										
		73	120	192	287	480	756	1180									
4	6,7	111	182	292	435	728	1146										
		65	106	169	253	423	666	1038									
4,5	7,5	100	163	261	389	650	1024										
		58	94	51	226	378	595	927	1266								
5	8,4	89	145	233	347	581	914	1425									
		51	84	135	202	337	531	828	1130								
6	10,1	74	121	193	289	483	760	1185									
		43	70	112	168	280	442	689	940	1247							
7	11,8	63	103	165	247	413	651	1015									
		36	60	96	143	240	378	590	805	1067							
8	13,5	55	90	145	216	361	569	887	1210								
		32	52	84	125	210	330	515	703	932	1301						
9	15,2	49	80	128	192	321	505	787	1075								
		28	46	74	111	186	293	457	625	828	1155						
10	16,8	44	72	116	173	290	457	712	972	1290							
		25	42	67	101	168	265	414	565	750	1045						
12	20	37	61	97	146	244	384	598	833	1083							
		21	35	56	84	141	223	347	517	712	967						
14	23	32	53	85	127	212	334	520	744	942	1315						
		18	30	49	73	123	194	302	437	604	833	1024					
16	27	45	72	108	180	284	443	643	902	1120							
		26	42	62	105	165	257	605	866	1166							
18	30	40	65	97	162	256	399	551	722	1007							
		23	37	56	94	148	231	544	777	1053							
20	33	37	59	8	147	232	362	516	656	916	1216						
		21	34	51	85	135	210	465	656	916	1216						
22	37	52	78	131	207	323	487	685	917	1216							
		30	45	76	120	288	441	640	875	1166							
25	42	46	69	116	182	285	416	576	779	1065							
		27	40	67	106	15	389	299	418	555	677	799	944	1156			
30	50	58	97	153	239	226	433	605	802	979	1155						
		33	56	89	139	182	251	351	466	569	671	793	971	1124			
35	59	82	130	202	277	367	512	680	830	979	1157						
		48	75	117	161	213	297	395	482	569	672	823	952				
40	67	72	114	178	243	317	451	599	730	862	1018						
		42	66	103	141	285	262	348	425	501	592	725	838				
45	76	101	157	215	285	397	528	677	760	898	1100						
		58	91	124	258	231	306	374	442	522	639	739					
50	84	91	142	194	269	359	477	582	688	812	955	1151					
		53	82	113	233	209	277	338	400	472	578	669					
55	93	82	128	175	235	325	431	527	621	734	898	1040					
		48	74	102	214	188	250	305	361	426	522	604					
60	101	118	161	224	299	397	484	572	675	827	957						
		68	94	183	173	230	281	332	392	481	556						
70	118	101	130	186	256	340	414	487	578	708	819						
		58	80	172	148	17	241	284	336	411	476						
70	126	95	129	99	239	318	388	458	541	663	767						
		55	75	160	139	185	225	266	314	385	446						
80	135	121	93	223	297	362	427	505	619	716							
		70	142	130	172	210	248	293	360	416							
90	152	107	82	198	264	322	380	449	549	636							
		62	128	115	153	187	220	261	319	369							
100	169	74	178	237	289	341	403	495	572								
		117	103	138	168	198	234	287	332								
110	185	94	126	153	181	214	262	303									
		138	183	223	263	311	381	441									
130	219	80	106	129	153	181	221	256									
		134	179	218	257	304	373	431									
133	224	78	104	127	149	177	216	250									
		158	193	228	269	330	382										
150	253	92	112	132	156	192	222										
		148	181	213	252	309	358										
160	270	86	105	124	149	179	208										
		161	190	225	275	319											
180	303	93	110	130	160	185											
		171	202	248	286												
200	337	99	117	144	166												
		166	197	241	279												
205	346	97	114	140	162												
		175	215	249													
230	388	102	125	145													
		183	212														
270	456	106	123														
		205															
280	472																

Ground at 20°C at maximum operation temperature at maximum AC resistance