

## TECHNICAL INFORMATION

### GENERAL FEATURES OF CABLES WITH 450/750/V NOMINAL VOLTAGE AND THERMOPLASTIC INSULATION AND SHEATH TS 9756 HD 21.1 S4 VDE 281/1

#### INSULATION:

Insulation should be made up of the thermoplastic material stated for each type of cable  
 TI1, TI2, TI4 and TI5 types are suitable for maximum continuous temperature 70°C and PVC insulated cables.  
 TI3 type is suitable for maximum continuous conductor temperature 90°C and PVC insulated cables.

#### INSULATION FEATURES

TEST	UNIT	TYPE OF COMPOSITION				
		TI 1	TI 2	TI 3	TI 4	TI 5
Max. continuous conductor temperature	°C	70	70	90	70	70
Max. temperature for short circuit conditions	°C	160	160	160	160	160
Min. thermal stability at 200°C	minute	-	-	240	-	-

#### SHEATH :

Sheathing should be made up of the thermoplastic material stated for each type of cable

Sheath :

- TM 1 type for PVC sheathed cables in fixed installation.
- TM 2 type for PVC sheathed twistable cables.
- TM 3 type for PVC sheathed heat resistant cables that conductor temperature does exceed 90°
- TM 5 type (H05W5-F, H05WC4V5-K) PVC sheathed and oil-resistant cables.
- TM 6 type for PVC sheathed cables which are resistant to low temperature.

#### APPLICATION :

Sheath is extruded as a homogenous layer;  
 a- Over the core for single core cables.  
 b- Over the core groups and filler or (if exist) over the inner sheath.

#### FEATURES OF SHEATH

TEST	UNITE	TYPE OF COMPOSITION					
		TM 1	TM 2	TM 3	TM 4	TM 5	TM 6
Plunge into mineral oil							
- Temperature of oil	°C	-	-	-	-	90±2	-
- Plunge time	hours	-	-	-	-	70x24	-
Min. thermal stability at 200°C	minute	-	-	240	-	-	-

#### ELECTRICAL PROPERTIES

TEST	UNIT	RATED VOLTAGE OF CABLES		
		300/300 V	300/500 V	450/750 V
Voltage applied on semi - finished cables(aa)	V	2000	2000	2500
Voltage applied on cores (aa)	V			
Wall thickness up to 0.60 mm	V	1500	1500	-
Wall thickness above 0.60 mm	V	2000	2000	2000
Long term resistance of insulation to direct current				
Temperature of water	°C	60±5	60±5	60±5
Voltage applied	V	220	220	220