



Level 3

Terminate and Connect Conductors

Unit Code: ETKP3-05

12 GLH

Learner Name: _____

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Unit Overview

Unit Aim

This unit is designed to enable the learner to develop the skills required, and apply the associated knowledge, in order that they are able to demonstrate the competence required to terminate and connect conductors and cables in electrical systems in accordance with approved industry practices, statutory and non-statutory regulations:

- The Electricity at Work Regulations (1989)
- BS 7671
- Health and Safety at Work Act (1974)
- Building Regulations (2000).

In delivery of this unit an emphasis shall be made to the learner on the necessity to keep up to date with the latest standards, technologies and practices which relate to and affect the topics covered in this unit. This is in then in keeping with good engineering practice.

Summary of Learning Outcomes

The learner will:

1. Prepare to terminate and connect cables and conductors.
2. Terminate and connect conductors and cables.

Assessment

Auditable evidence sourced from a real working environment must be provided to illustrate that, the learner has demonstrated on **two separate occasions** they can terminate and connect conductors in accordance with the assessment criteria for each of the learning outcomes.

Guidance:

Note that additional reference boxes may be given against assessment criteria to provide enough opportunity to record evidence. **If completing this document electronically remember to save your work.**

Learning Outcome 1: Prepare to terminate and connect cables and conductors

The learner must be able to:

1.1	Evaluate and apply appropriate procedures to include:			
	a selecting appropriate tools/equipment to enable termination and connection			
	b adopting appropriate PPE			
	c following a safe system of work (e.g. risk assessment, method statement, permit to work procedure)			
1.2	Assess and confirm it is safe to complete termination and connection in terms of:			
	a checking for presence of supply/carrying out safe isolation			
	b mechanical soundness of the electrical equipment to be connected to			
	c checking for unsafe situations			

Evidence to be Referenced

Learning Outcome 2: Terminate and connect conductors and cables

The learner must be able to:

2.1	Terminate and connect cables and conductors in accordance with manufacturers instructions, BS 7671, and any relevant drawing or specification: Cover Four:	
	a single core cable (singles)	
	b multicore insulated cable	
	c PVC / PVC flat profile cable (twin and earth)	
	d MICC cable	
	e fire performance (such as FP 200 etc.)	
	f SWA cable	
	g GSWB galvanised steel wire braid	
	h data cable	

Learning Outcome 2: Terminate and connect conductors and cables (continued)

The learner must be able to:

2.2 Connect to electrical equipment in accordance with manufacturers instructions, BS 7671, and any relevant drawing or specification: **Cover Five:**

a isolators /switches

b socket outlets

c distribution-boards / consumer control units

d luminaires

e electric motors / motor control equipment

f overcurrent protective devices

g earthing terminals

h control panels

i data socket outlets or data connections

j fire detection/alarm components .

k other appropriate equipment (such as: heating system components etc.)

2.3 Terminate and connect conductors, using appropriate methods: **Cover Two:**

a screwing

b crimping

c soldering

d non-screw compression

e insulation displacement

2.4 Ensure that terminations and connections are electrically and mechanically sound (e.g. by simple inspecting and testing terminations)

2.5 Ensure cables have appropriate identification in accordance with BS 7671

Evidence to be Referenced

