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| Title | **Perform installation of electrical machines** | | |
| Level | **2** | **Credits** | **15** |

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| Purpose | This competency standard is intended for those who carry out electrical operations. People holding credit for this competency standard are able to: Plan and prepare for installation; install electrical machine; carry out operational checks; and complete work. |

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| Classification ISCED | 0713 Electricity and energy |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **J1:**  **Plan and prepare for installation** | **P1-** Identify and obtain safety and other regulatory requirements for installation  **P2-** Select and termination electrical cables  **P3-** Arrange earthing | **K1-** Safety requirements; Specifications; hazard identification  **K2-** Types and size of cables; mounting of cables; tools for cable works  **K3-** Earthing requirements |
| **J2:**  **Install electrical machine** | **P1-** Confirm installation specification & drawings  **P2-** Arrangements  for loading & unloading of electric equipment  **P3-** Position and configure machine  **P4-** Joint cables and connections  **P5-** Confirm installation | **K1-** Installation requirements  **K2-** Importance of correct position and location; Safety precautions  **K3-** Types and application of different jointing methods  - tin  - crimped lug, cable shoes, eyelets and tunnel terminals  - ferrules and shrinking nut  - bolt & screw terminal  **K4-** Supervisor and/or client communication |
| **J3:**  **Carry out operational testing** | **P1-** Test and adjust component and/or parts  **P2-** Confirm operation of electrical machine  **P3-** Explain operation of machine to customer | **K1-** Functional tests and adjustments  **K2-** Machine features  **K3-** Communication skills |
| **J4:**  **Complete work** | **P1-** Complete work related documents and procedures  **P2-** Perform final quality inspection  **P3-** Clean up and store tools, equipment and materials | **K1-** Importance of documentation; Customer care procedures and techniques  **K2-** Importance of quality; handing over to client  **K3-** Waste disposal procedures; Care of tools and equipment |