

CS48 Electrician

1. Job role

TCF sub-sector	Cross-sector
Job role	CS48 Electrician
Job role description	Installs, maintains and repairs electrical systems and equipment across TCF production and processing environments to ensure safe, reliable and efficient operation. In the TCF industries—where production systems range from garment and footwear manufacturing to textile processing and automated laundry operations—the Electrician supports machinery, control systems, automation and utilities, ensuring compliance with Australian electrical and WHS standards while minimising downtime and supporting continuous production.
Performance expectations	• Maintaining safe and compliant electrical systems across plant and equipment • Minimising electrical-related downtime and production disruption • Ensuring reliable operation of machinery, automation and control systems • Complying with Australian electrical standards and WHS regulations • Supporting preventive and corrective maintenance programs • Maintaining accurate service, testing and compliance records • Supporting integration and operation of automated systems • Responding rapidly to electrical faults and breakdowns • Contributing to energy efficiency and system optimisation • Supporting continuous improvement in plant performance
Specialisation	Industrial electrical systems, automation and PLC systems, control panels, sensors and instrumentation, energy systems
Application in other TCF sectors	• Apparel production supporting electrical systems in cutting, sewing and finishing operations • Textile manufacturing supporting processing, tufting, knitting and finishing systems • Footwear production supporting assembly, stitching and automated machinery • Leather goods production supporting cutting, assembly and finishing equipment • Dry cleaning and laundry services supporting washers, dryers, conveyors and plant systems • Technical textile and specialty services supporting controlled processing environments • Manufacturing and processing industries supporting industrial electrical systems and automation

2. Key tasks and critical work functions

Key tasks	• Installing and maintaining electrical wiring, systems and equipment • Diagnosing and repairing electrical faults in machinery and plant • Testing motors, drives, sensors and control panels • Performing preventative and corrective electrical maintenance • Maintaining and troubleshooting PLC and automation systems • Ensuring compliance with electrical standards and safety procedures • Maintaining documentation and service records • Coordinating with maintenance, engineering and production teams
Critical work functions	• Ensuring safe and compliant electrical operation of plant and equipment • Preventing electrical hazards and equipment failure • Maintaining continuous production through reliable systems • Supporting automation and control system performance • Managing lockout/tagout and electrical safety procedures • Reducing downtime through effective fault diagnosis • Supporting energy efficiency and system optimisation

3. Technical skills

Electrical fault diagnosis	Using diagnostic tools and methods to identify and resolve electrical faults
Motor and drive systems	Maintaining motors, variable speed drives and related systems
Control panels and circuits	Working with control panels, wiring systems and electrical circuits
PLC systems	Maintaining and troubleshooting programmable logic controllers
Sensors and instrumentation	Working with sensors, switches and industrial instrumentation systems
Automation systems	Supporting automated machinery and integrated production systems
Preventative maintenance	Planning and executing electrical maintenance schedules
Compliance standards knowledge	Applying Australian electrical codes and WHS requirements
Energy systems management	Monitoring and optimising electrical energy usage
Technical documentation	Maintaining accurate service, testing and compliance records

4. Generic Skills

Problem solving	Diagnosing and resolving complex electrical issues
Attention to detail	Ensuring precision in electrical work and compliance
Communication	Coordinating with maintenance, engineering and production teams
Time management	Prioritising maintenance and repair activities

Safety awareness	Maintaining safe working practices and procedures
Adaptability	Working across varied systems and technologies

5. Emerging skills

Emerging skills	- Using IoT-enabled machine diagnostics and monitoring systems - Applying predictive maintenance technologies - Working with advanced PLC programming and integration - Using real-time energy monitoring and optimisation systems - Supporting automation and smart factory systems - Applying sustainable energy and efficiency practices
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6. VET Qualifications and Skill Sets

Entry-level preparation	UEE30820 Certificate III in Electrotechnology Electrician
Advanced development	UEE40420 Certificate IV in Electrical - Instrumentation or equivalent

7. Job progression

Possible job progression	Apprentice Electrician → Electrician → Senior Electrician → Maintenance Supervisor → Engineering Manager
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8. Classification

Australian Qualifications Framework	AQF Level 3-4 (trade qualified)
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 3
Open Source Classification of Occupations for Australia (OSCA)	Electrician - Industrial / Manufacturing



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