

# BEM Micro-credential



BEM content (for all partners)	Title/name of the credential	Installer of distribution cabinets		
	Function of the micro-credentials / purpose	The purpose of the micro-credential program is to train participants to independently perform tasks related to the selection, control and installation of switchboards in a business-residential building or industrial plant. Most often, he works in the field of installation works in construction, respecting the current regulations in the field of distribution cabinets.		
	Possible target groups	unemployed persons, persons who want to retrain		
	Branch/sector of application	electrical engineering, construction, industry and all other sectors that could not function successfully without the use of electricity		
	Fields of application / work environment	residential, business, industrial, electrical operating premises		
	Typical work/professional tasks	grouping of appliances and devices in a certain place according to the design and technical documentation in order to transform, ensure, manage and control electrical energy		
	Learning outcomes (personal and job related)	<p>Knowledge</p> <ul style="list-style-type: none"> <li>List the measures of safety, health and protection at work and environmental protection</li> <li>knows the basic terms and definitions of electrical installations</li> <li>distinguishes between types of low-voltage networks</li> <li>knows graphic symbols in electrical installations</li> <li>distinguishes between the types of documentation and records required for the installation of the distribution cabinet</li> <li>lists the tools, equipment, devices, instruments and accessories for the installation of the distribution cabinet</li> <li>specify the division of distribution cabinets</li> <li>list the types of distribution cabinets</li> <li>knows the types of materials used to make a distribution cabinet</li> <li>explain how to choose a distribution cabinet</li> <li>explain the data from the nameplate of the distribution cabinet</li> </ul>	<p>Skills</p> <ul style="list-style-type: none"> <li>chooses the type of distribution cabinet based on the design and technical documentation</li> <li>uses technical instructions, catalogs and documentation of the manufacturer of the distribution cabinet</li> <li>prepares the workplace, the necessary tools, devices, instruments and accessories for the installation of the distribution cabinet</li> <li>mounts protective devices in the distribution cabinet on the basis of design and technical documentation</li> <li>indicates protective devices according to their purpose and circuit to which they belong</li> <li>mounts the basic elements of electrical equipment in the distribution cabinet according to the type and level of voltage</li> <li>divides the interior of the distribution cabinet using partitions or barriers into specially separated spaces</li> <li>respects the minimum distances between non-</li> </ul>	<p>Competences</p> <ul style="list-style-type: none"> <li>application of design and technical documentation for the assembly of the distribution cabinet</li> <li>preparing the workplace for the installation of the distribution cabinet</li> <li>selection and installation of a suitable switch cabinet</li> <li>clear and correct configuration of electrical equipment in the distribution cabinet</li> <li>upgrading of the electrical equipment of the distribution cabinet in case of expanding the capacity of the industrial plant and the like</li> <li>control and elimination of malfunctions in the functioning of the distribution cabinet</li> <li>assembly of the distribution cabinet</li> <li>proper maintenance of the distribution cabinet</li> <li>application of regulations, standards and measures of safety, health and protection at work and environmental protection</li> </ul>

		<ul style="list-style-type: none"><li>• describe the purpose of electrical equipment elements that can be installed in the distribution cabinet</li><li>• explain the arrangement of electrical equipment elements inside the distribution cabinet</li><li>• knows the types of wiring conductors</li><li>• knows the marking of the connections of the electrical equipment elements of the distribution cabinet</li><li>• knows the basics of the thermal calculation of the distribution cabinet for the case of subsequent installation of an element of electrical equipment</li></ul>	<ul style="list-style-type: none"><li>insulated parts of different poles</li><li>• uses especially flexible conductors for wiring the basic elements of electrical equipment according to the design and technical documentation</li><li>• carries out wiring diagrams between electrical equipment elements of the distribution cabinet</li><li>• connects the electrical equipment elements of the distribution cabinet according to the connection scheme</li><li>• tests the continuity between the corresponding connections</li><li>• conducts tests to check the functionality of the distribution cabinet</li><li>• mounts the distribution cabinet in its destination</li><li>• regularly maintains the distribution cabinet to ensure its longevity and functionality</li><li>• fills in documentation, keeps records of completed tasks according to the work order and prepares a report on completed work</li><li>• implements and checks the application of rules and measures of safety and health at work as well as environmental protection in their work</li></ul>		
	Validation	<p>Criteria</p> <ul style="list-style-type: none"><li>• reliability; (compliance of the assessment with established, public and precise assessment criteria);</li><li>• validity; (the evaluation shows the effects of learning - achievement of the results, engagement and progress of the students);</li><li>• variety of assessment methods:</li><li>• (selection of appropriate and application different methods and techniques evaluations to ensure</li><li>• validity, reliability and objectivity of grades);</li><li>• assessment without discrimination and selection on any basis;</li></ul>	<p>Procedures</p> <ul style="list-style-type: none"><li>• formation of the exam room commissions;</li><li>• determining the list of tasks for the exam;</li><li>• extracting work assignments;</li><li>• competence check</li><li>• by creating assignments;</li><li>• examination records;</li><li>• awarding of certificates;</li></ul>		
	Recognised/accepted (documented by MoU)	Company name: Johnson Electric d.o.o. Nis, Serbia			
	Provider(s)	Vocational secondary schools Publicly recognized organizers of educational activities (JPOA)			

<b>Additional information (if needed)</b>	Entry level / prerequisites	NOKS level 1 - primary education and upbringing, primary adult education, primary ballet education and upbringing and primary music education and upbringing
	Possible duration (recommendation)	
<b>Specific content (national) (if needed)</b>	Position in the chain of educational programmes	Informal training
	Reference to NQF	2nd level of NOKS; 2nd level EOK
	Credits	5