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**EtherNet/IP communication interface and protocol of
mechanical and electrical equipment in fully mechanized coal
mining face - Part 2: Extended object library**

煤矿综采工作面机电设备EtherNet/IP通信接口和协议 第2部分：扩展对象库

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Foreword

This document was issued on 6 February 2023 by the National Energy Administration of the PRC and takes effect on 6 August 2023.

It is a NB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 73.100.01, Chinese classification D 90.

This document was drafted in accordance with the rules given in GB/T 1.1-2020, Directives for standardization-Part 1: Rules for the structure and drafting of standardizing documents.

This document is Part 2 of NB/T 11118, EtherNet/IP communication interface and protocol of mechanical and electrical equipment in fully mechanized coal mining face. The following parts of NB/T 11118 have already been issued:

Part 1: General rules;

Part 2: Extended object library;

Part 3: Shearer equipment data sheet;

Part 4: Hydraulic support equipment data sheet;

Part 5: Fluid supply system equipment data sheet;

Part 6: Scraper conveyor, beam stage loader and crusher equipment data sheet;

Part 7: Mobile substation equipment data sheet;

Part 8: Low-voltage AC vacuum feeder switch equipment data sheet;

Part 9: Multi-circuit low-voltage AC vacuum electromagnetic starter equipment data sheet;

Part 10: Low-voltage AC vacuum electromagnetic starter equipment data sheet;

Part 11: Integrated lighting and signal protection device equipment data sheet.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing body of this document shall not be held responsible for identifying any or all such patent rights.

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Introduction

NB/T 11118, EtherNet/IP communication interface and protocol of mechanical and electrical equipment in fully mechanized coal mining face, establishes the technical specification for the use of EtherNet/IP Ethernet communication by the mechanical and electrical equipment of a fully mechanized coal mining face. It may be regarded as an extension of GB/Z 26157 (all parts), Digital data communications for measurement and control-Fieldbus for use in industrial control systems-Type 2: ControlNet and EtherNet/IP specification, the extension being mainly embodied in the following: provisions are made for the wireless interface of the data link layer, the object library and the device profiles are extended, and the data types are extended.

NB/T 11118 consists of eleven parts.

Part 1: General rules. The purpose is to determine the physical layer, data link layer, network layer, transport layer, presentation layer and application layer of the EtherNet/IP communication of the mechanical and electrical equipment of a fully mechanized coal mining face, and to specify the safety requirements and the data types of the equipment.

Part 2: Extended object library. The purpose is to define the object model library applicable